

The Honorable Robert S. Lasnik

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WASHINGTON  
AT SEATTLE**

MCKENNA DUFFY and MICHAEL BRETT,  
individually and on behalf of all others  
similarly situated,

Plaintiffs,

v.

YARDI SYSTEMS, INC., BRIDGE  
PROPERTY MANAGEMENT, L.C.,  
CALIBRATE PROPERTY MANAGEMENT,  
LLC, DALTON MANAGEMENT, INC.,  
HNN ASSOCIATES, LLC, LEFEVER  
MATTSON, MANCO ABBOTT, INC.,  
MORGUARD CORPORATION, R.D.  
MERRILL REAL ESTATE HOLDINGS,  
LLC, SUMMIT MANAGEMENT  
SERVICES, INC., and CREEKWOOD  
PROPERTY CORPORATION,

Defendants.

Case No. 2:23-cv-01391-RSL

**FIRST AMENDED CLASS ACTION  
COMPLAINT**

**JURY TRIAL DEMANDED**

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1 Plaintiffs McKenna Duffy and Michael Brett bring this action on behalf of themselves  
 2 individually and on behalf of a class consisting of all persons who leased multifamily residential  
 3 real estate units directly from a defendant or co-conspirator from September 8, 2019, through  
 4 the present, in the nationwide multifamily housing rental market (hereinafter “the multifamily  
 5 market”). Plaintiffs bring this action for treble damages and injunctive relief under Section 1 of  
 6 the Sherman Act. Plaintiff demands a trial by jury.

## 7 I. NATURE OF THE ACTION

8 1. Rental prices across America have reached new levels of unaffordability for the  
 9 average American. The U.S. Department of Housing and Urban Development specifically  
 10 defines households as “rent-burdened” if they pay more than 30% of their income for housing.  
 11 This is because households that pay so much of their income for housing may, according to  
 12 HUD, “have difficulties affording necessities such as food, clothing, transportation and medical  
 13 care.”<sup>1</sup> According to 2023 studies, the average American renter is now cost burdened, with the  
 14 typical renter now paying more than 30% percent of their income for housing.<sup>2</sup> This is the first  
 15 time this has occurred in the more than 20 years that Moody’s Analytics has tracked this metric.

16 2. Unbeknownst to millions of Americans struggling to pay rent, Landlord  
 17 Defendants<sup>3</sup> are using a coordinated pricing algorithm administered by Defendant Yardi  
 18 Systems, Inc. (“Yardi”), a property management software company, that is specifically designed  
 19 to inflate rental prices. Indeed, the artificial price inflation is in the very name of the algorithm –

21 <sup>1</sup> HUD, Rental Burdens: Rethinking Affordability Measures (available at  
 22 [https://www.huduser.gov/portal/pdredge/pdr\\_edge\\_featd\\_article\\_092214.html#:~:text=HUD%20defines%20cost%2Dburdened%20families,of%20one's%20income%20on%20rent](https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_092214.html#:~:text=HUD%20defines%20cost%2Dburdened%20families,of%20one's%20income%20on%20rent)) (last  
 23 accessed November 3, 2023).

24 <sup>2</sup> The Hill, “The Average American tenant is rent-burdened. Here’s what that means for the  
 25 Economy”, February 21, 2023 (available at <https://thehill.com/changing-america/sustainability/infrastructure/3866947-renters-paying-30-percent-of-income-for-housing-crisis/>).

26 <sup>3</sup> Defendants Bridge Property Management, L.C., Calibrate Property Management, LLC,  
 27 Dalton Management, Inc., HNN Associates, LLC, LeFever Mattson, Manco Abbott, Inc.,  
 28 Morguard Corporation, R.D. Merrill Real Estate Holdings, LLC, Summit Management  
 Services, Inc., and Creekwood Property Corporation, collectively, are the “Landlord  
 Defendants” and together with Defendant Yardi Systems, Inc., the “Defendants.”

1 “RENTmaximizer.”<sup>4</sup> For more than a decade, Yardi has repeatedly touted the ability of the  
 2 algorithm to generate supracompetitive pricing, emphasizing how Defendant Landlords that use  
 3 “RENTmaximizer” are able to increase rents faster than comparable properties. Plaintiffs  
 4 challenge this conspiracy among Landlord Defendants and Yardi that has led to ordinary  
 5 Americans being overcharged on rental prices that they pay across the nation.

6 3. Landlord Defendants manage multifamily rental properties across the United  
 7 States. In a competitive market, these companies would compete on rental prices to attract  
 8 renters—that is, they would set rents in accordance with the fundamentals of supply and  
 9 demand. When demand surges, rents may go up. When demand falls, property management  
 10 companies normally prioritize occupancy rates, and thus increase concessions (e.g., offering a  
 11 first month free) to attract renters.

12 4. In the absence of knowledge about competitors’ pricing strategies, property  
 13 managers can only make their best educated guesses and set their prices at optimal positions—  
 14 usually a bit lower than what is offered by competitors—to attract renters in the market. If a  
 15 lessor wants to take a chance to raise rents regardless of market conditions, other competitors  
 16 will soon take that lessor’s business away by listing their units at competitive prices.

17 5. Yardi, together with the Landlord Defendants, has unlawfully solved this  
 18 problem with a product originally called “RENTmaximizer.” Launched in 2011,  
 19 RENTmaximizer is an algorithmic pricing tool marketed to lessors that is intended to  
 20 “automate” lessors’ “rental pricing process” and thus help “multifamily property managers  
 21 maximize rental income” by “increasing . . . revenue by 3 to 6 percent”<sup>5</sup>—that is,  
 22 RENTmaximizer effectively outsources the management of rental pricing from a landlord to

23 <sup>4</sup> Yardi’s website indicates that “RENTmaximizer” has been renamed “Revenue IQ.” *See*  
 24 “Revenue IQ,” <https://www.yardi.com/products/yardi-revenue-iq/>. The domain  
 25 <https://www.yardi.com/rentmaximizer> redirects users to the “Revenue IQ” page, which  
 26 describes Revenue IQ as substantially similar to RENTmaximizer. All references herein to  
 27 “RENTmaximizer” in this complaint also include by reference Revenue IQ.

28 <sup>5</sup> *See Yardi Adds Two Revenue Management Experts to its Yardi RENTmaximizer Team*,  
 Business Wire (June 22, 2011), available at <https://www.businesswire.com/news/home/20110622006700/en/Yardi-Adds-Two-Revenue-Management-Experts-to-its-Yardi-RENTmaximizer-Team>.

Yardi itself, which then implements higher prices collectively across a group of landlords. According to Terri Downen, Yardi’s senior vice president of sales, “[b]y automating rental pricing that factors in portfolio and market data, RENTmaximizer not only improves rental income while maintaining occupancy, it simplifies the process by *eliminating rent rate guesswork and traditional sales devices such as concessions and specials*.”<sup>6</sup>

6. In other words, Yardi’s RENTmaximizer is specifically, and publicly, marketed as a means to eliminate the discounting that would occur in a competitive market. Landlord Defendants who agree to use RENTmaximizer understand that its purpose is to foil the operation of the competitive market. Indeed, in marketing materials, Yardi advertises that “revenue grows on Yardi”<sup>7</sup> and that Yardi users “beat the market by a minimum of 2%” and

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<sup>6</sup> *The Rockbridge Group Increases Rent Revenue with Yardi RENTmaximizer*, Business Wire (June 21, 2016), <https://www.businesswire.com/news/home/20160621005024/en/Rockbridge-Group-Increases-Rent-Revenue-Yardi-RENTmaximizer>.

<sup>7</sup> Yardi, *Revenue Grows on Yardi: RENTmaximizer* (video), (June 19, 2017), <https://www.facebook.com/Yardi/videos/revenue-grows-on-yardi-rentmaximizer/1501017369961971/>.

“gain[] on average more than 6% net rental income.”<sup>8</sup> Yardi even tells its users: “You manage your business, we manage your pricing”:

### Better Results

Clients using RENTmaximizer have gained on average more than 6% net rental income growth while improving occupancy. And, RENTmaximizer properties consistently beat the market by a minimum of 2%. This intuitive, transparent pricing system empowers your sales force, provides clear and comprehensive reporting and promotes adoption throughout your organization. Leases are priced by the system daily, which allows for fast adjustment to market conditions and changes in your inventory and traffic, while adjusting for cost constraints such as vacancy loss, turnover costs, inventory hold days and lease expiration management.

### Better Service

You manage your business, we manage your pricing. Only Yardi provides you with a dedicated revenue manager with valuable industry experience along with your revenue management software. Your dedicated revenue manager will get to know your business processes, assets and goals to provide superior support and will work with you to maximize your returns. And as a RENTmaximizer client, you'll receive this service and training continuously to promote ongoing success.

7. Marketing materials for Yardi’s “Revenue IQ” product—which, on information and belief, is a rebranded version of RENTmaximizer—echo the same theme, boasting that lessors can use Yardi’s pricing software to “[w]in at pricing” and “[c]onsistently beat the market”<sup>9</sup>:

<sup>8</sup> Yardi, *Yardi Multifamily Suite* (2019), available at <https://resources.yardi.com/documents/multifamily-suite-brochure/>.

<sup>9</sup> Yardi, *Revenue IQ*, <https://www.yardielevate.com/multifamily/revenue-iq/> (last visited Sept. 7, 2023).

## Win at pricing using integrated revenue intelligence

- Price new or renewal leases based on business goals, market conditions and inventory
- Consistently beat the market by utilizing revenue management instead of pricing yourself
- Enhance strategy and performance with built-in access to nationwide market intelligence

8. According to Yardi’s publicly-available promotional materials, a key input to Yardi’s pricing algorithm, or “engine,” is competitor pricing data. Specifically, RENTmaximizer asks users to input their data, such as rental rates and occupancy, into its system; meanwhile, the system automatically incorporates market-specific information on “comparative rent” to, in Yardi’s words, give users “accurate and timely information regarding your market—including every comp and how you compete”<sup>10</sup>—or what it also calls “complete visibility,” including “performance benchmarking” “compared to the market, submarket, and competition”:

<sup>10</sup> Yardi Systems, Inc., *Yardi Elevate* (2020), available at <https://resources.yardi.com/documents/elevate-suite-for-multifamily-brochure/>.






9. Yardi specifically markets to potential users that Yardi RENTmaximizer/RevenueIQ provides extensive data on competitors' pricing that users can then use to maximize their own rental prices. For example, in one non-public 2023 presentation provided to a potential customer, Yardi touted that through RevenueIQ, "your operations team gains holistic revenue intelligence from rental rates and occupancy to property performance benchmarks compared to the market, submarket, and competition."

#### Complete Visibility

Your operations team gains holistic revenue intelligence from rental rates and occupancy to property performance benchmarks compared to the market, submarket, and competition. Your managers enjoy greater confidence that you are delivering the best possible rental prices.


10. Yardi also operates Yardi Matrix, a commercial real estate intelligence source. Yardi Matrix actively collects data from Defendants and other multifamily operators related to rental prices at multifamily properties across the entire nation. Subscribers to Yardi Matrix receive rental price information, as well as other data such as short and long-range forecasts of rent and occupancy at the market and sub-market levels. Yardi publicly advertises the extensive amount of data available through Yardi Matrix:



**FEATURES**

**YARDI MATRIX MULTIFAMILY**

<p><b>REAL-TIME PROPERTY DATA</b></p> <p>Gain access to patented improvement and location ratings, rental rate, occupancy history and current property manager information.</p>	<p><b>LOAN DATA</b></p> <p>Search for acquisition prospects by loan maturity schedules, lenders, borrowers, loan terms and estimated DSCR/LTV ratios.</p>	<p><b>TRENDS &amp; FORECASTS</b></p> <p>Stay current with monthly national reports, metro reports and quarterly forecasts of rental rates, rent growth and occupancy across markets and submarkets.</p>
<p><b>NEW SUPPLY PIPELINE</b></p> <p>Get insight into new supply pipeline information at the asset, competitive set and market level.</p>	<p><b>MATRIX EXPERT</b></p> <p>Access exclusive aggregated and anonymized residential revenue and expense comps.</p>	

 [yardimatrix.com/multifamily](https://yardimatrix.com/multifamily) | [matrix@yardi.com](mailto:matrix@yardi.com) or (480) 663-1149

**YARDI** | Energized for Tomorrow

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11. Yardi Matrix also conducts “rent surveys” multiple times annually to collect current pricing information about rental properties. As part of the rent survey, Yardi employees, masquerading as potential renters, call apartment community building to collect information about rents and current rent specials. Yardi itself has acknowledged that information Yardi collects from rent surveys is used in RENTmaximizer, stating that asking rent adjustments in RENTmaximizer are based, in part, on “public information collected through surveys.” Yardi’s public marketing for Matrix explicitly states that Matrix data is incorporated into RENTmaximizer.

## MARKET INTELLIGENCE

Yardi Matrix provides nationwide intelligence on markets, submarkets, competition, developments, rents, occupancy and more. This data delivers accurate indicators of economic trends and performance and helps you price apartments profitably. When this market-specific data is incorporated with your RENTmaximizer data, you can accurately benchmark performance and factor it into rent projections and calculations which enhances your revenue management strategy and helps boost the performance of individual assets.

12. Defendants provide information to Yardi Matrix with the understanding that, in part, they will receive pricing recommendations from RENTmaximizer that are based on Yardi Matrix data. CW 6, a former Yardi employee, stated that all Yardi clients – or Voyager clients – contractually agree to share pricing and occupancy data with Yardi and to allow Yardi to use “aggregated data” as part of Matrix and RENTmaximizer. CW 6 stated that “when you sign your contract with them, you agree to give your data, aggregated.” CW 6 stated that Yardi has “all the data from all of their properties inside Matrix” and that “somebody then buys that data in the form of RENTmaximizer.” Similarly, CW 7, who worked at Yardi between 2019 and 2021 as a senior account executive, explained that while Yardi’s clients were “very concerned about sharing their rental rates more than anything,” “[m]ost people appreciated the fact that if they shared data, they would get data from other clients using things like RENTMaximizer, so that everybody was benefitting from the data.”

13. Leveraging data gathered from RENTmaximizer users as well as comparative rent, RENTmaximizer’s rental pricing algorithm then calculates a “rent recommendation” that users can—and are encouraged to—automatically adopt. These prices are updated “daily.” Yardi also advertises (as noted above) that it gives lessors “complete visibility” into the market, providing them with “property performance benchmarking (compared to the market, submarket and competition)”<sup>11</sup>:

### Complete Visibility

RENTmaximizer provides holistic revenue intelligence for your operations team. With this transparent system you’ll see everything from rental rates and occupancy data to property performance benchmarking (compared to the market, submarket and competition). Prospects and residents will gain various pricing options, while your managers will enjoy greater confidence that you are delivering the best possible rental prices.

14. Furthermore, Yardi provides RENTmaximizer users “with a dedicated revenue manager” who works closely with individual lessors to hone their usage of RENTmaximizer by “get[ting] to know your business processes, assets, and goals to provide superior support and . . . work[ing] with you to maximize your returns.”<sup>12</sup> Promotional materials for Yardi’s “Revenue IQ” product similarly advertise the assistance of “dedicated Yardi expert[s]” who “help manage pricing” and assist lessors in “[g]et[ting] pricing recommendations and control[ling] pricing at the property level”<sup>13</sup>:

<sup>11</sup> *Id.* Similar promotional materials for Yardi Revenue IQ state: “Get visibility into rent movement and operational performance. *Know your market in real time — including every comp and how you compete.* Daily management reports help you understand pricing changes and show you upcoming exposure along with traffic and trends. Provide extensive revenue intelligence for your operations team and give your managers confidence in the rental prices they offer. With this transparent system you’ll see: Rental rates and occupancy data; Pricing options for prospects and residents; *Property performance benchmarking (compared to the market, submarket and competition).*” See Yardi Systems, Inc., *Revenue IQ*, <https://www.yardi.com/products/yardi-revenue-iq/> (emphasis added) (last visited Sept. 7, 2023).

<sup>12</sup> *Yardi Elevate*, *supra* note 10.

<sup>13</sup> See *Revenue IQ*, *supra* note 9.

## Get hands-on support from a technical account manager

- Rely on a dedicated Yardi expert to help manage pricing
- Get pricing recommendations and control pricing at the property level
- Continuously advance algorithms with an integrated propriety feedback loop

15. Yardi emphasizes to prospective clients that Yardi's RENTmaximizer/Revenue IQ project will manage pricing for clients who purchase the software. For example, in one non-public 2023 presentation to a prospective client, Yardi stated "[y]ou manage your business; we manage pricing," while emphasizing at the same time the availability of a "dedicated, experienced revenue manager" who would work with the client along with the software.

### Better Service

You manage your business; we manage pricing. Only Yardi offers you a dedicated, experienced revenue manager with your revenue management software. Your revenue manager gets to know your business processes, assets, and goals and works with you to maximize your returns.

16. Revenue managers employed by Yardi help further Landlord Defendants' coordination by facilitating their implementation of the common pricing scheme produced by usage of RENTmaximizer. In particular, Yardi's revenue managers give Landlord Defendants "confidence" in their decisions to charge inflated prices. As Adam Goldfarb, vice president for lessor Manco Abbott, stated in a 2015 press release: "Having a dedicated revenue manager working with us from the Yardi RENTmaximizer team is a huge benefit. If our staff or property

owners question any of our rates, we have our Yardi RENTmaximizer expert who can dig deeper to support our pricing — and that gives our organization and clients great confidence.”<sup>14</sup>

17. The result of this scheme is that Landlord Defendants outsource their once-independent pricing and supply decisions to a single decisionmaker, RENTmaximizer, and need not directly disclose their pricing strategies to each other in order to fix rent prices. Instead, Landlord Defendants collectively adopt a coordinated pricing strategy implemented and enforced by Yardi’s RENTmaximizer product. Defendants further understand that the pricing data they provide to Yardi is used to power the supracompetitive pricing adjustments that Yardi’s RENTmaximizer provides to their competitors. Yardi also publicly markets the housing operators who have adopted RENTmaximizer, and publicizes that usage of RENTmaximizer allows housing operators to charge supracompetitive prices.

18. The Federal Trade Commission and Department of Justice’s “Antitrust Guidelines for Collaborations Among Competitors” emphasize that “[o]ther things being equal, the sharing of information relating to price, output, costs, or strategic planning is more likely to raise competitive concern than the sharing of information relating to less competitively sensitive variables. Similarly, other things being equal, the sharing of information on current operating and future business plans is more likely to raise concerns than the sharing of historical information.”<sup>15</sup> These are precisely the types of information Landlord Defendants exchange through Yardi.

19. Lessors have spoken openly and enthusiastically about Yardi’s market-beating results and ability to take the “guesswork” out of setting rents and imposes “discipline” on pricing decisions.<sup>16</sup> As Philip Nored, owner and managing partner of lessor HNN Associates

<sup>14</sup> *Manco Abbott Inc. Achieves Rental Growth, Gains Expert Pricing Insight with Yardi RENTmaximizer*, Business Wire (Nov. 10, 2015), <https://www.businesswire.com/news/home/20151110005039/en/>.

<sup>15</sup> Federal Trade Commission & U.S. Department of Justice, Antitrust Guidelines for Collaborations Among Competitors 15–16 (April 2000).

<sup>16</sup> Economists recognize that pricing discipline, as well as public commentary about the need for discipline, is evidence of potential coordinated pricing. Jonathan Baker & Timothy Bresnahan, *Economic Evidence in Antitrust: Defining Markets and Measuring Market Power* in



described it in a 2017 press release, “RENTmaximizer has *taken the guesswork* out of our rental pricing and lease terms, and boosts pricing performance through an intelligent system of measurements, fixed factors *and discipline*.”<sup>17</sup> Another has stated bluntly: “[t]hanks to RENTmaximizer, we have *eliminated all concessions and specials*.”<sup>18</sup> Another has written: “RENTmaximizer *eliminates the fear factor of exposure* that is a natural concern for property and regional managers. RENTmaximizer factors in historical and relevant data to assure us that we will get the traffic and leases we need to meet our revenue goals.”<sup>19</sup>

20. Other lessors have been even more frank, acknowledging that with RENTmaximizer, they can “aggressively” raise rents in a way that would have previously been impossible. For example, Brantley White, the president of lessor Ardmore Residential, a multifamily housing operator located in North Carolina, stated in a 2016 Yardi press release that Ardmore was able to raise rents 5-6% since its implementation of Yardi RENTmaximizer in 2016. White explained that “RENTmaximizer has allowed us to *push rents more aggressively* and takes more human error out of the process.”<sup>20</sup> He candidly acknowledged that “[w]e simply wouldn’t have raised rents that much or that quickly on our own.”<sup>21</sup>

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Paolo Buccirosi, Stanford Law School, John M. Olin Program in Law and Economics, Working Paper No. 328 1 (2006). (“If industry participants routinely respond to low prices not by pointing to lower costs but instead by complaining about pricing breakdowns and calling for improved pricing discipline, and if such comments in the trade press are commonly followed by increasing prices shortly thereafter, that evidence could suggest that the participants see themselves as engaged in coordinated pricing punctuated by occasional price wars.”) (available at [https://www-leland.stanford.edu/~tbres/research/buccirosi\\_01\\_ch01\\_001-042.pdf](https://www-leland.stanford.edu/~tbres/research/buccirosi_01_ch01_001-042.pdf)).

<sup>17</sup> HNN Associates, LLC Optimizes Rental Pricing Performance with Yardi RENTmaximizer, Business Wire (Feb. 17, 2015), <https://www.businesswire.com/news/home/20150217005101/en/HNN-Associates-LLC-Optimizes-Rental-Pricing-Performance-with-Yardi-RENTmaximizer> (emphasis added).

<sup>18</sup> See *Rockbridge Group*, *supra* note 6 (emphasis added).

<sup>19</sup> *Beztak Grows Rental Income with Yardi RENTmaximizer*, Business Wire (June 16, 2017), available at <https://www.businesswire.com/news/home/20170616005099/en/Beztak-Grows-Rental-Income-with-Yardi-RENTmaximizer> (emphasis added).

<sup>20</sup> *Ardmore Residential Raises Rents 5-6% with Yardi RENTmaximizer*, Business Wire (Apr. 21, 2016), <https://www.businesswire.com/news/home/20160421005001/en/Ardmore-Residential-Raises-Rents-5-6-with-Yardi-RENTmaximizer> (emphasis added).

<sup>21</sup> *Id.*

21. Confidential witnesses echo this and recognize that RENTmaximizer gives lessors an unfair advantage. For example, Confidential Witness 1 (“CW 1”)<sup>22</sup>, who worked as a former leasing consultant for Bridge Property Management, stated that she regularly used Yardi to set prices for the apartments she managed. Specifically, she would input the square footage of an apartment, its location, and Yardi’s system would then offer listing prices that she “just went for” without “question[ing].” CW 1 explained further that Yardi would show comparative pricing at specific competitor apartment locations and that, in her opinion, this “was not fair for renters.” She stated bluntly: “It was ridiculous. We were supposed to be helping these people who couldn’t afford a home. Instead, we were raising rents.”

22. Similarly, Confidential Witness 2 (“CW 2”)<sup>23</sup>, another former employee at Bridge Property Management, stated that the prices generated by Yardi were never questioned and could change daily. He stated that this pricing practice gave “an unfair advantage” to lessors because they “all know what they should be renting for” by using the same pricing platform.

23. Lessors have also explicitly and publicly praised (a) the insight into competitors’ pricing that Yardi provides (i.e., Yardi’s ability to facilitate a direct exchange of current pricing information between competitors) and (b) the supracompetitive returns it generates—indeed, much of this praise is found in scores of Yardi press releases touting RENTmaximizer’s achievements in raising rents for clients in the multifamily market. For example, in a 2016 press release, Jeffrey Denson, the owner and COO of lessor Dalton Management, stated that Dalton Management was able to increase rent per unit without losing business to its competitors as “RENTmaximizer has . . . made Dalton Management better aware of how its properties compare to the rest of the market,” explaining further that Dalton was “able to raise rents at a property we thought was keeping up—now we’re getting \$100 more per unit and maintaining occupancy.”<sup>24</sup>

<sup>22</sup> CW 1 worked as a leasing consultant for Bridge Property Management in San Antonio, Texas, from 2013 to 2014.

<sup>23</sup> CW 2 worked as a leasing consultant for Bridge Property Management in the Seattle, Washington area from 2019 to 2020.

<sup>24</sup> *Dalton Management Reports Increased Revenue Using Yardi RENTmaximizer*, Business Wire (May 19, 2016), <https://www.businesswire.com/news/home/20160519005003/en/Dalton-Management-Reports-Increased-Revenue-Using-Yardi-RENTmaximizer>.



24. Similarly, a “success story” available on Yardi’s website states that lessor Avesta had seen “a significant gain [in revenue] after only six months” of implementing automated RENTmaximizer pricing and that, for every dollar it invested in the RENTmaximizer system, Avesta “achieved a return of nearly \$30.” The press release quotes Will Newton, Director of Support Systems at Avesta, as stating: “[T]hanks to the revenue and leasing metrics, along with the support of our dedicated Yardi RENTmaximizer pricing specialist, we don’t leave money on the table”<sup>25</sup>:

### The Story

#### Automated Pricing Increases Revenue

After implementing RENTmaximizer, Avesta saw a significant gain after only six months. For every dollar they invested in the system, they achieved a return of nearly \$30. Will Newton, director of support systems, explained that as a resident-focused company, Avesta is delighted that RENTmaximizer makes it easy to offer customers a variety of lease terms and movein dates, so each resident can choose what works best for them and their budget.

Newton elaborated further, saying that the revenue and leasing metrics Avesta gets from RENTmaximizer — along with the support of a dedicated RENTmaximizer revenue expert — ensure they consistently make profitable pricing decisions for every property.

25. In addition to their use of RENTmaximizer, Defendants also engaged in direct communications with their competitors regarding their pricing in furtherance of their conspiracy. Confidential witness interviews reveal that certain individual Landlord Defendants implemented a regular strategy of engaging in “market surveys” of their competitors. This is consistent with the long-standing academic understanding that competitors’ monitoring of each other facilitates the stability of cartels: “In the half century since the seminal paper of Stigler, it has become conventional wisdom that transparency in cartels - monitoring of competitors’ prices, sales, and profits facilitates collusion. As [one source puts it]... ‘Lesser observability, including more noisy signals of price cuts, makes sustaining a given supracompetitive price harder.’ This idea is ubiquitous in textbooks on microeconomics...and antitrust law.”<sup>26</sup>

<sup>25</sup> Yardi, *Success Stories – Avesta*, <https://www.yardi.com/about-us/success-stories/avesta/> (last visited Sept. 7, 2023).

<sup>26</sup> Sugaya, Takuo and Alexander Wolitzky. “Maintaining Privacy in Cartels.” *Journal of Political Economy* 126, 6 (December 2018): 2569-2607, available at

26. As part of this strategy, employees of Defendants would call their competitors, often on a weekly basis, and specifically ask what prices those competitors were charging. For example, CW 1, a former leasing consultant for Bridge Property Management, stated that she regularly conducted market surveys by “shopping” other apartment complexes, where she would gather information on pricing. Similarly, CW 2, another former employee at Bridge Property Management, recalled that he would call competitors’ complexes and ask their leasing agents for rent prices. Remarkably, Yardi competitor RealPage has defended its conduct in a separate lawsuit based on conduct similar to that alleged here by stating, among other things, that “its software helps reduce the risk of collusion that would occur if landlords relied on phone surveys of competitors to manually price their units.”<sup>27</sup> It is axiomatic that the exchange of competitively sensitive information is illegal per se if this exchange is made in furtherance of an agreement to fix prices; indeed, in 2011, the State of Connecticut sued (and subsequently reached a settlement with) hotels for the closely analogous practice of “calling other hotels to learn their occupancy rates and what they are charging.”<sup>28</sup>

27. RENTmaximizer is today widely used throughout the United States to set multifamily rental prices. In 2013, for instance, Dharmendra Sawh (then Yardi’s “principal for revenue management”) stated publicly that RENTmaximizer was used to manage 8 million residential units around the world<sup>29</sup>—a number that is likely far higher today.<sup>30</sup> Consistent with this, a test run economic analysis confirms that collective usage of Yardi RENTmaximizer leads

[https://www.law.northwestern.edu/research-faculty/clbe/events/antitrust/documents/wolitzky\\_maintaining\\_privacy.pdf](https://www.law.northwestern.edu/research-faculty/clbe/events/antitrust/documents/wolitzky_maintaining_privacy.pdf).

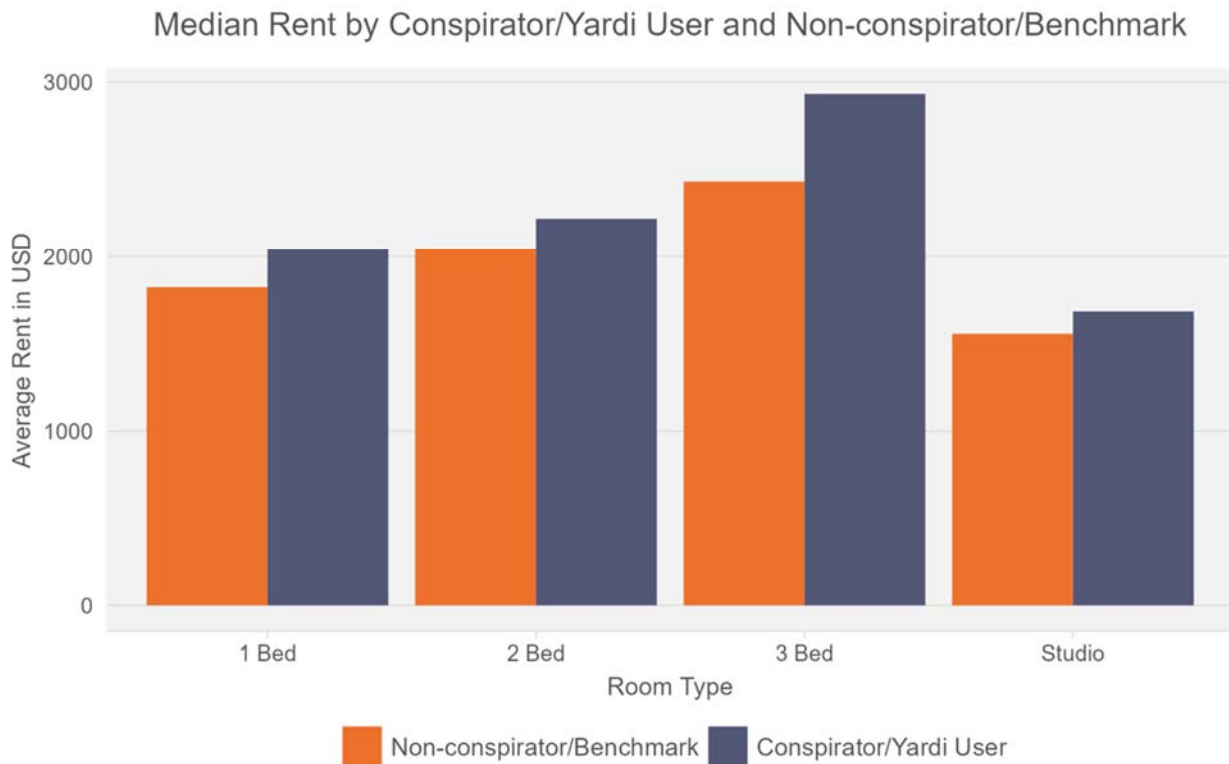
<sup>27</sup> *Id.*

<sup>28</sup> *Hotels Pay Fine for Alleged Price Fixing*, Hartford Courant (Aug. 11, 2011), <https://www.courant.com/2011/08/11/hotels-pay-fine-for-alleged-price-fixing/>.

<sup>29</sup> Patrick Nelson, *Algorithms for Rent: The Price is Right*, Tech News World (Mar. 12, 2013), <https://www.technewsworld.com/story/algorithms-for-rent-the-price-is-right-77498.html>.

<sup>30</sup> Guy Lyman, *Don’t Miss This! Unveiling of “AIRM” AI Revenue Management at RealWorld*, RealPage, Inc. (Sept. 8, 2020), <https://www.realpage.com/blog/dont-miss-this-unveiling-of-airm-ai-revenue-management-at-realworld/>. By contrast, in September 2020, Yardi’s leading competitor RealPage—which also makes a product that automatically sets residential real estate lease prices—claimed that its own revenue management software was used to set the price for “over four million [multifamily] units.” *Id.*

to higher prices. Public rent data was collected over a period of several weeks in August 2023 from Seattle, Charlotte, and Phoenix. A regression analysis was then performed in zip codes where usage of Yardi RENTmaximizer was higher than 15% of available units. The regression analysis controlled for various property and geographic features, such as (1) size of the unit, (2) number of bathrooms, (3) census average rent in the zip code, and (4) median income in the zip code. Across over 23,000 units, the regression found an average overcharge of 6% on units priced using RENTmaximizer as compared to units not priced using RENTmaximizer, including for studio, 1-bedroom, 2-bedroom, and 3-bedroom apartments. This is closely consistent with Yardi's repeated public statements that usage of RENTmaximizer led to a 6% average increase in net rental income:



28. Further, economic research confirms that the use of pricing algorithms leads to anticompetitive effects, including elevated prices. Modern algorithms can use artificial intelligence to reach the objective of maximizing profits without the need for human intervention. For example, a 2021 empirical study found, in line with the predictions of theoretical models, that when gas stations in Germany used algorithms to set prices, their

1 margins increased by approximately 9%. Critically, the authors found that algorithm use only  
 2 raised prices above competitive levels in places where competitors adopted algorithms jointly,  
 3 and thus that “algorithmic pricing software adoption raises margins *only through its effects on*  
 4 *competition.*”

5 29. Government regulators have long raised concerns about industry-wide use of  
 6 algorithmic pricing. Earlier this year, for example, the Principal Deputy Assistant Attorney  
 7 General of the Antitrust Division for the Department of Justice stated: “Where competitors  
 8 adopt the same pricing algorithms, our concern is only heightened. Several studies have shown  
 9 that these algorithms can lead to tacit or express collusion in the marketplace, potentially  
 10 resulting in higher prices, or at a minimum, a softening of competition.”<sup>31</sup> Similarly, Maureen  
 11 Ohlhausen, when serving as acting Chairperson of the Federal Trade Commission, explained in  
 12 2017 how multiple firms outsourcing pricing decisions to a single third-party actor—just as  
 13 lessors have done with RealPage—raises significant antitrust concerns and is little different  
 14 from funneling confidential pricing information through a “guy named Bob”:

15 What if algorithms are not used in such a clearly illegal way, but  
 16 instead effectively become a clearing house for confidential pricing  
 17 information? **Imagine a group of competitors sub-contracting**  
 18 **their pricing decisions to a common, outside agent that**  
 19 **provides algorithmic pricing services. Each firm communicates**  
 20 **its pricing strategy to the vendor, and the vendor then**  
 21 **programs its algorithm to reflect the firm’s pricing strategy.**  
 22 **But because the same outside vendor now has confidential price**  
 23 **strategy information from multiple competitors, it can**  
 24 **program its algorithm to maximize industry-wide pricing.** In  
 25 effect, the firms themselves don’t directly share their pricing  
 26 strategies, but that information still ends up in common hands, and  
 27 that shared information is then used to maximize market-wide  
 28 prices.

29 Again, **this is fairly familiar territory for antitrust lawyers, and**  
 30 **we even have an old fashioned term for it, the hub-and-spoke**  
 31 **conspiracy. Just as the antitrust laws do not allow competitors**

32 <sup>31</sup> U.S. Dep’t of Justice, *Principal Deputy Assistant Attorney General Doha Mekki of the*  
 33 *Antitrust Division Delivers Remarks at GCR Live: Law Leaders Global 2023* (Feb. 2, 2023),  
 34 available at [https://www.justice.gov/opa/speech/principal-deputy-assistant-attorney-general-](https://www.justice.gov/opa/speech/principal-deputy-assistant-attorney-general-doha-mekki-antitrust-division-delivers-0)  
 35 [doha-mekki-antitrust-division-delivers-0](https://www.justice.gov/opa/speech/principal-deputy-assistant-attorney-general-doha-mekki-antitrust-division-delivers-0).

1           **to exchange competitively sensitive information directly in an**  
 2           **effort to stabilize or control industry pricing, they also prohibit**  
 3           **using an intermediary to facilitate the exchange of confidential**  
               **business information.**

4           Let's just change the terms of the hypothetical slightly to  
 5           understand why. Everywhere the word "algorithm" appears, please  
               just insert the words "a guy named Bob".

6           Is it ok for a guy named Bob to collect confidential price strategy  
 7           information from all the participants in a market, and then tell  
 8           everybody how they should price? **If it isn't ok for a guy named**  
               **Bob to do it, then it probably isn't ok for an algorithm to do it**  
               **either.**<sup>32</sup>

9           30.     The Department of Justice has also recognized the significant anticompetitive  
 10           harms that may stem from centralized information exchanges. The DOJ recently brought an  
 11           enforcement action against Agri Stats, a third party information exchange service in the broiler,  
 12           pork, and turkey industries.<sup>33</sup> Like Yardi Matrix, Agri Stats facilitated the exchange of  
 13           competitively sensitive price and supply information between competitors. The Department of  
 14           Justice also recently filed a notice in an action against Yardi competitor RealPage, which is  
 15           alleged to have perpetuated a highly similar scheme using its "YieldStar" pricing algorithm,  
 16           stating that the United States "has a particularly substantial interest in addressing the proper  
 17           application of Section 1 of the Sherman Act, 15 U.S.C. § 1, to the use of algorithms by  
 18           competitors to help set pricing. Companies' use of algorithms in price setting, often in an effort  
 19           to increase pricing, has become more prevalent in the modern economy. As a result, the issues  
 20

21  
 22  
 23  
 24           <sup>32</sup> Maureen K. Ohlhausen, *Should We Fear The Things That Go Beep In the Night? Some*  
 25           *Initial thoughts on the Intersection of Antitrust law and Algorithmic Pricing*, Federal Trade  
 26           Commission (May 23, 2017), [https://www.ftc.gov/system/files/documents/public\\_statements/1220893/ohlhausen\\_-\\_concurrences\\_5-23-17.pdf](https://www.ftc.gov/system/files/documents/public_statements/1220893/ohlhausen_-_concurrences_5-23-17.pdf).

27           <sup>33</sup> See U.S. Dep't of Justice, *Justice Department Sues Agri Stats for Operating Extensive*  
 28           *Information Exchanges Among Meat Processors* (September 28, 2023), available at  
               <https://www.justice.gov/opa/pr/justice-department-sues-agri-stats-operating-extensive-information-exchanges-among-meat>.

involved in this case are of increasing significance to the application of antitrust law across the economy.”<sup>34</sup>

31. Defendants’ misconduct—centered on the coordination and setting of optimal pricing through a shared, centralized decisionmaker—is not meaningfully different than a traditional hub-and-spoke price-fixing conspiracy. Because this conduct is facially anticompetitive, i.e., it produces clear anticompetitive effects and offers no procompetitive benefits, it is a naked restraint on trade that should be deemed illegal *per se*. But even if this conduct somehow benefitted competition and furthered consumer welfare in some minimal way (it does not), the anticompetitive effects would vastly outweigh any benefits and should be swiftly condemned under the rule of reason.

32. The conspiracy Plaintiffs challenges is unlawful under Section 1 of the Sherman Act. Plaintiffs bring this action as a class action on behalf of a class of individuals to recover damages, trebled, as well as injunctive and other appropriate relief, detailed *infra*, on behalf of all others similarly situated.

## II. PARTIES

33. Plaintiff McKenna Duffy is a citizen and resident of the State of Washington. Plaintiff Duffy rented multifamily residential units in properties managed by Landlord Defendant R.D. Merrill Real Estate Holdings. Plaintiff Duffy had a lease with The Wave from 2021 to 2022, then with The Nolo from 2022 to the present. Plaintiff Duffy paid inflated rental prices as a result of Defendant R.D. Merrill Real Estate Holdings’ usage of Yardi’s centralized pricing mechanism.

34. Plaintiff Michael Brett is an Australian citizen and resident of the State of Washington. Plaintiff Brett rented a multifamily residential unit in properties managed by Landlord Defendant R.D. Merrill Real Estate Holdings. Plaintiff Brett signed a lease with The Wave from August 2020 to November 2021. Plaintiff Brett paid inflated rental prices as a result

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<sup>34</sup> See United States’ Notice of Potential Participation (ECF No. 599), *In re: RealPage Rental Software Antitrust Litigation (No. II)*, Case No. 3:23-MD-3071 (Oct. 12, 2023).



of Defendant R.D. Merrill Real Estate Holdings’ usage of Yardi’s centralized pricing mechanism.

35. Defendant Yardi Systems, Inc. (“Yardi”) is a California corporation headquartered in Barbara, California. Yardi provides industry-leading property management software and services to the multifamily real estate industry, including the RENTmaximizer/Revenue IQ revenue management software described herein.

36. Landlord Defendant Bridge Property Management, L.C. (“Bridge Property”) is a Utah limited liability company headquartered in Sandy, Utah. Bridge Property manages over 50,000 multifamily rental units throughout the United States.<sup>35</sup> Bridge Property is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2015.<sup>36</sup>

37. Landlord Defendant Calibrate Property Management, LLC (“Calibrate”) is a Washington limited liability company headquartered in Kirkland, Washington. Calibrate manages approximately 1,900 units in four states and is “rapidly growing.”<sup>37</sup> Calibrate is one of Yardi’s clients and began using its RENTmaximizer revenue management software beginning in at least 2023.

38. Landlord Defendant Dalton Management, Inc. (“Dalton”) is an Oregon corporation headquartered in Beaverton, Oregon. Dalton manages over 15 apartment complexes throughout California, Oregon, and Washington.<sup>38</sup> Dalton is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2016.<sup>39</sup>

<sup>35</sup> <https://www.bridgepm.com/> (last visited Sept. 7, 2023).

<sup>36</sup> *Bridge Property Management Gains 9.4% Year-Over-Year Rental Growth with Yardi RENTmaximizer*, Business Wire (Sept. 29, 2015), <https://www.businesswire.com/news/home/20150929005288/en/Bridge-Property-Management-Gains-9.4-Year-Over-Year-Rental-Growth-with-Yardi-RENTmaximizer>.

<sup>37</sup> <https://calibratemanagement.com/> (last visited Sept. 7, 2023).

<sup>38</sup> <https://daltonmngt.com> (last visited Sept. 7, 2023).

<sup>39</sup> *Dalton Management Reports Increased Revenue Using Yardi RENTmaximizer*, Business Wire (May 19, 2016), <https://www.businesswire.com/news/home/20160519005003/en/Dalton-Management-Reports-Increased-Revenue-Using-Yardi-RENTmaximizer>.

39. Landlord Defendant HNN Associates, LLC (“HNN”) is a Washington limited liability company headquartered in Bellevue, Washington. HNN manages the 52 properties owned by Devco Residential Group, LLC in Washington state.<sup>40</sup> HNN is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2015.<sup>41</sup>

40. Landlord Defendant LeFever Mattson is a California corporation headquartered in Citrus Heights, California. LeFever Mattson manages over 3,000 residential units in California.<sup>42</sup> LeFever Mattson is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2017.<sup>43</sup>

41. Landlord Defendant Manco Abbott, Inc. (“Manco Abbott”) is a California corporation headquartered in Fresno, California. Manco Abbott is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2015.<sup>44</sup>

42. Landlord Defendant Morguard Corporation is a Canadian Corporation headquartered in Mississauga, Ontario. Morguard Corporation’s wholly owned subsidiary, Morguard Management Company, Inc. (“Morguard”), manages rental properties throughout the United States and is a Louisiana corporation headquartered in Metairie, Louisiana. Morguard is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2015.<sup>45</sup>

<sup>40</sup> <https://www.lifeisbetterhere.com/ourproperties.aspx> (last visited Sept. 7, 2023).

<sup>41</sup> *HNN Associates, LLC Optimizes Rental Pricing Performance with Yardi RENTmaximizer*, Business Wire (February 17, 2015), <https://www.businesswire.com/news/home/20150217005101/en/HNN-Associates-LLC-Optimizes-Rental-Pricing-Performance-with-Yardi-RENTmaximizer>.

<sup>42</sup> <https://www.lefevermattson.com/> (last visited Sept. 7, 2023).

<sup>43</sup> *LeFever Mattson Achieves Success with Yardi*, Business Wire (July 28, 2017), <https://www.businesswire.com/news/home/20170728005004/en/LeFever-Mattson-Achieves-Success-with-Yardi>.

<sup>44</sup> *Manco Abbott Inc. Achieves Rental Growth, Gains Expert Pricing Insight with Yardi RENTmaximizer*, Business Wire (November 10, 2015), <https://www.businesswire.com/news/home/20151110005039/en/Manco-Abbott-Inc.-Achieves-Rental-Growth-Gains-Expert-Pricing-Insight-with-Yardi-RENTmaximizer>.

<sup>45</sup> *See* Morguard North American Residential Real Estate Investment Trust, Q4 2015 Earnings Call (Feb. 18, 2016).



43. Landlord Defendant R.D. Merrill Real Estate Holdings, LLC (hereafter referred to as “Pillar Properties”) is a Washington limited liability company headquartered in Seattle, Washington. Under the registered trade name “Pillar Properties,” R.D. Merrill manages 2,114 units.<sup>46</sup> Pillar Properties is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2016.<sup>47</sup>

44. Landlord Defendant Summit Management Services, Inc. (“Summit”) is an Ohio corporation headquartered in Akron, Ohio. Summit manages over 4,000 units across the country.<sup>48</sup> Summit is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2012.<sup>49</sup>

45. Landlord Defendant Creekwood Property Corporation (“Tonti Properties”) is a Texas corporation headquartered in Dallas, Texas. Creekwood Property Corporation’s trade name is Tonti Properties. Tonti Properties manages 17 properties in Arizona, Colorado, Florida, Louisiana, and Texas. Tonti Properties is one of Yardi’s clients and began using its RENTmaximizer revenue management software in at least 2016.<sup>50</sup>

#### A. Co-Conspirators and Agents

46. Co-conspirator Alco Management, Inc. (“Alco”) is a Tennessee corporation headquartered in Memphis, Tennessee. During the Class Period, Alco and/or its predecessors, wholly owned or controlled subsidiaries, or affiliates managed more than 6,000 rental units

<sup>46</sup> <https://www.pillarproperties.com> (last visited Sept. 7, 2023).

<sup>47</sup> Yardi, *Pillar Properties on Elevate*, <https://www.yardi.com/about-us/success-stories/pillar-properties-on-elevate/>; Yardi, *Empowering Our Clients: Pillar Properties & RENTmaximizer* (Sept. 21, 2016), <https://www.facebook.com/Yardi/videos/empowering-our-clients-pillar-properties-rentmaximizer/1219283938135317/>.

<sup>48</sup> <https://summitmanagementliving.com/> (last visited Sept. 7, 2023).

<sup>49</sup> *Yardi RENTmaximizer Gives Summit Management Services Inc. New Rental Pricing Insight*, Business Wire (January 31, 2012), <https://www.businesswire.com/news/home/20120131006159/en/Yardi-RENTmaximizer-Gives-Summit-Management-Services-Inc.-New-Rental-Pricing-Insight>.

<sup>50</sup> *Tonti Properties Increases Rental Income with Yardi RENTmaximizer*, Business Wire (June 14, 2016), <https://www.businesswire.com/news/home/20160614005001/en/>.

throughout nine states.<sup>51</sup> Alco is one of Yardi's clients and began using its RENTmaximizer revenue management software in at least 2017.<sup>52</sup>

47. Co-conspirator McWhinney Property Management, LLC ("McWhinney Property") is a Colorado corporation headquartered in Denver, Colorado. During the Class Period, McWhinney Property and/or its predecessors, wholly owned or controlled subsidiaries, or affiliates managed approximately 19 multifamily properties in its portfolio.<sup>53</sup> McWhinney Property is one of Yardi's clients and began using its RENTmaximizer revenue management software beginning in at least 2021.

48. Co-conspirator KRE Group, Inc. ("KRE Group") is a New Jersey corporation headquartered in Jersey City, New Jersey. During the Class Period, KRE Group and/or its predecessors, wholly owned or controlled subsidiaries, or affiliates managed approximately 22 rental properties in New Jersey and Pennsylvania. KRE Group is one of Yardi's clients and began using its RENTmaximizer revenue management software in at least 2017.<sup>54</sup>

49. Co-conspirator Towne Properties is an Ohio domestic for-profit corporation headquartered in Cincinnati, Ohio. Towne Properties manages more than 12,000 units in Ohio, Kentucky, Indiana and North Carolina.<sup>55</sup> Towne Properties is one of Yardi's clients and began using its RENTmaximizer revenue management software in at least 2020.

50. Co-conspirator Tribridge Residential, LLC ("Tribridge") is a Georgia limited liability company headquartered in Atlanta, Georgia. During the Class Period, Tribridge and/or its predecessors, wholly owned or controlled subsidiaries, or affiliates managed over 30

<sup>51</sup> <https://www.alcomgt.com/> (last visited Sept. 7, 2023).

<sup>52</sup> *The Benefits of BI*, Alco Management (November 8, 2017), <https://www.alcomgt.com/blog/2017/11/08/the-benefits-of-bi/>.

<sup>53</sup> <https://mcwhinney.com/portfolio/?company=multifamily> (last visited Sept. 7, 2023).

<sup>54</sup> *KRE Group Grows Profits and Occupancy with Yardi RENTmaximizer*, Business Wire (March 14, 2017), <https://www.businesswire.com/news/home/20170314005389/en/KRE-Group-Grows-Profits-and-Occupancy-with-Yardi-RENTmaximizer>.

<sup>55</sup> <https://www.towneproperties.com/> (last visited Sept. 7, 2023).

1 properties over five states. Tribridge is one of Yardi's clients and began using its  
 2 RENTmaximizer revenue management software in at least 2015.<sup>56</sup>

3 51. Co-conspirators John Does 1-100 are those property managers and/or owners  
 4 who are Yardi's clients and have used its RENTmaximizer revenue management software.  
 5 Discovery will reveal the identities of these entities, which are not known to Plaintiffs.

6 52. Defendants' officers, directors, agents, employees, or representatives engaged in  
 7 the conduct alleged in this Complaint in the usual management, direction or control of  
 8 Defendants' business or affairs.

9 53. Defendants are also liable for acts done in furtherance of the alleged conspiracy  
 10 by companies they acquired through mergers and acquisitions.

11 54. When Plaintiffs refers to a corporate family or companies by a single name in  
 12 this Complaint, they are alleging that one or more employees or agents of entities within that  
 13 corporate family engaged in conspiratorial acts on behalf of every company in that family. The  
 14 individual participants in the conspiratorial acts did not always know the corporate affiliation of  
 15 their counterparts, nor did they distinguish between the entities within a corporate family. The  
 16 individual participants entered into agreements on behalf of their respective corporate families.  
 17 As a result, those agents represented the entire corporate family with respect to such conduct,  
 18 and the corporate family was party to the agreements that those agents reached.

19 55. Each of the Defendants acted as the agent of, co-conspirator with, or joint  
 20 venture partner of the other Defendants and co-conspirators with respect to the acts, violations,  
 21 and common course of conduct alleged in this Complaint. Each Defendant or co-conspirator  
 22 that is a subsidiary of a foreign parent acted as the United States agent when agreeing to use  
 23 Yardi RENTmaximizer at multifamily rental properties managed in the United States.

24  
 25  
 26  
 27 <sup>56</sup> *TriBridge Residential Opts for Full Yardi Multifamily Solution Stack*, Yardi Newsletter  
 28 (Winter 2015), [https://media.whatcounts.com/sitestuff\\_yardi/121914\\_MFeNews/20141111-tribridge.html](https://media.whatcounts.com/sitestuff_yardi/121914_MFeNews/20141111-tribridge.html).

### III. JURISDICTION AND VENUE

56. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1337, as this action arises out of Section 1 of the Sherman Antitrust Act (15 U.S.C. § 1) and Sections 4 and 16 of the Clayton Antitrust Act (15 U.S.C. §§ 15 and 26).

57. This Court has personal jurisdiction over Defendants under Section 12 of the Clayton Act (15 U.S.C. § 22), Federal Rule of Civil Procedure 4(h)(1)(A), and Washington's long-arm statute, the Revised Code of Washington § 4.28.185.

58. Defendants, directly or through their divisions, subsidiaries, predecessors, agents, or affiliates, engage in interstate commerce in the sale of multifamily residential real estate leases.

59. Venue is proper in this District pursuant to Section 12 of the Clayton Act (15 U.S.C. § 22) and the federal venue statute (28 U.S.C. § 1391), because one or more Defendants maintain business facilities, have agents, transact business, and are otherwise found within this District and certain unlawful acts alleged herein were performed and had effects within this District.

### IV. FACTUAL BACKGROUND

#### A. Yardi's RENTmaximizer is widely used in the national multifamily rental market to set lessors' prices.

60. Defendant Yardi Systems, Inc. ("Yardi") develops, sells, and supports real estate investment management and property management software. Its clients are managers of residential rental apartments, to which it offers products for, among other things, managing operations, executing leases, running analytics, and providing various resident and tenant services.

61. Yardi was founded in 1984. That same year, Yardi created "Basic Property Management" software for the Apple II computer.<sup>57</sup> Since that time, Yardi has developed a widely used property management software, Yardi "Voyager," that allows multifamily

<sup>57</sup> Yardi, *Leadership Team*, <https://www.yardi.com/about-us/leadership-team/> (last visited Sept. 7, 2023).

1 residential property managers to “[c]entralize operational, financial, leasing, and maintenance  
 2 management . . . in a single database,” as well as handle “marketing, screening, insurance,  
 3 revenue management, business intelligence, and more[.]”<sup>58</sup> It “offers unrivaled solutions for  
 4 residential property management, built into a single, mobile software platform.”<sup>59</sup>

5 62. Yardi advertises its Voyager software as the “most advanced and widely adopted  
 6 residential property management [software as a service<sup>60</sup>] platform with built-in accounting,  
 7 real-time performance analysis and complete mobility.”<sup>61</sup>

8 63. Yardi’s dominance in the property managements software market is reflected in  
 9 the fact that Yardi has been sued by multiple rivals for monopolization in that market. In 2011,  
 10 RealPage, a company that also provides various property management services, asserted  
 11 counterclaims against Yardi for Yardi’s attempts to use its dominant position over Voyager  
 12 software users to coerce them into signing contracts that prevent Voyager users from using  
 13 competitors’ product.<sup>62</sup> Real Page stated that Yardi had a dominant market position in the  
 14 property management software market due to the “widespread adoption of its Voyager  
 15 software,” and the massive costs associated with transferring data and information Yardi users  
 16  
 17

18 <sup>58</sup> See Yardi, *Voyager Residential*, [https://www.yardi.com/products/yardi-voyager-](https://www.yardi.com/products/yardi-voyager-residential/)  
 19 [residential/](https://www.yardi.com/products/yardi-voyager-residential/) (last visited Sept. 7, 2023).

20 <sup>59</sup> Yardi, *Voyager*, <https://www.yardi.com/products/yardi-voyager/>.

21 <sup>60</sup> “Software as a service” (“SaaS”) is a “cloud based software delivery model that allows  
 22 end users to access software applications over the internet” via remote servers (e.g., via a web  
 23 browser or mobile app) rather than requiring that the software be downloaded and installed. See  
 24 Salesforce, *What is SaaS?*, <https://www.salesforce.com/in/saas/> (last visited Sept. 7, 2023).  
 Yardi transitioned Voyager to a SaaS model in approximately 2012. See Yardi, Press Release,  
*Yardi Announces Voyager SaaS and Private Cloud Solutions* (Mar. 22, 2012),  
<https://www.yardi.com/news/yardi-announces-voyager-saas-and-private-cloud-solutions/>.

25 <sup>61</sup> *Voyager Residential*, *supra* note 40. Yardi also makes a separate program for multifamily  
 26 property managers, Yardi “Elevate,” that it advertises as an “all-in-one solution for asset  
 27 management . . . . designed for CEOs, COOs, asset managers, and other operational managers.”  
 See Yardi, *Why Elevate?*, <https://www.yardielevate.com/why-yardi-elevate/> (last visited Sept. 7,  
 2023).

28 <sup>62</sup> RealPage, Inc.’s Opp’n to MTD, *Yardi Systems, Inc. v. RealPage, Inc.*, No. CV11-690  
 ODW (C.D. Cal. 2011).

1 would incur if they choose to switch software. RealPage explained that the high switching costs  
2 that Yardi Voyager users face have effects beyond users themselves:

3 Many large institutional property owners and investors do not  
4 manage properties themselves, but instead hire professional  
5 property management firms to manage their properties for a fee  
6 (“fee managers”). These institutional owners and investors  
7 frequently use Yardi’s Voyager Back Office Accounting Software  
8 themselves in order to monitor their investments. To ensure that  
9 they maintain a single system of record throughout their portfolio,  
10 these institutional owners and investors often require their fee  
11 managers to also use Yardi’s Voyager Back Office Accounting  
12 Software. Once these fee managers adopt Yardi’s Voyager Back  
13 Office Accounting Software, they face two layers of lock-in: lock-  
14 in due to switching costs, and lock-in because the institutional  
15 owners are themselves locked into the use of Voyager Back Office  
16 Accounting Software and mandate that their fee managers use it as  
17 well. Thus, a fee manager that wishes to stop using Voyager Back  
18 Office Accounting Software faces two virtually insurmountable  
19 obstacles: (1) switching costs that would take years to recoup, and  
20 (2) a significant loss of business from institutional owners and  
21 investors that are, themselves, locked-in to using Voyager Back  
22 Office Accounting Software and will not work with fee managers  
23 who do not also license and use Voyager Back Office Accounting  
24 Software. The effects of this double lock-in problem on fee  
25 managers are pronounced. To illustrate, when looking at the total  
26 number of apartment units managed by the top 50 property  
27 managers, over 75% of those that are fee managed (over 1.1 million  
28 units) are managed using Yardi’s Voyager Back Office Accounting  
Software. Yardi’s dominance is even more apparent when looking  
at the total number of apartment units managed by the top 25  
property managers (those most likely to fee manage for major  
institutional property owners): among that subset, over 90% of  
those units that are fee managed are managed using Yardi’s  
Voyager Back Office Accounting Software.<sup>63</sup>

64. In 2015, Entrata, a company that also provides various property management  
services, brought antitrust claims against Yardi for monopolization. Entrata stated that Yardi has  
been a dominant provider of residential property management software and was used by in  
excess of 60% of the multifamily housing industry.<sup>64</sup> As of 2016, more than eight million  
residential units were managed using Yardi software, and more than 1,650 property

<sup>63</sup> RealPage Inc.’s Second Amended Counterclaim, at ¶ 26, *Yardi Systems, Inc. v. RealPage, Inc.*, No. CV11-690 ODW (C.D. Cal. 2011).

<sup>64</sup> Plaintiff’s First Amended Complaint, ¶ 24, *Entrata v. Yardi Systems*, 2:15-cv-00102-CW (D. Utah, 2015).



1 management customers are using Yardi Voyager 7S.<sup>65</sup> Those numbers are likely far higher  
 2 today: an October 31, 2023 press release states that Yardi has “over 15 million units on its  
 3 platform.”<sup>66</sup>

4 65. In 2011, Yardi launched a new “revenue management system” integrated into the  
 5 Yardi Voyager platform called “Yardi RENTmaximizer.”<sup>67</sup> According to a press release  
 6 announcing its release, RENTmaximizer was a tool intended to “automate[] the rental pricing  
 7 process” and help “multifamily property managers maximize rental income” by “increasing a  
 8 multifamily property owner’s revenue by 3 to 6 percent”<sup>68</sup>—that is, RENTmaximizer  
 9 effectively transfers the management of rental pricing from a landlord to Yardi itself.  
 10 Specifically, the press release explained that RENTmaximizer:

11 helps apartment owners and managers set prices directly from the  
 12 trends of supply, demand and market conditions (i.e., market  
 13 comparisons). Using pricing algorithms, this holistic trends-and-  
 14 rules-based model helps multifamily property managers maximize  
 15 rental income and occupancy by pricing each new and renewal  
 16 lease for maximum revenue. Yardi RENTmaximizer also provides  
 17 complete transparency into how the price was determined to further  
 18 facilitate the leasing process.<sup>69</sup>

16 66. According to Dharmendra Sawh, one of two experts Yardi had then recently  
 17 hired to help launch RENTmaximizer, RENTmaximizer represented Yardi’s attempt to make  
 18 “automated rental pricing a key element of the [Yardi] platform.”<sup>70</sup> Similarly, in a 2016 press  
 19 release announcing one lessor’s (the Rockbridge Group) adoption of RENTmaximizer, Terri  
 20 Downen, then Yardi’s senior vice president of sales, explained that “[b]y automating rental  
 21 pricing that factors in portfolio and market data, RENTmaximizer not only improves rental  
 22

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23 <sup>65</sup> *Id.* at ¶ 18.

24 <sup>66</sup> Yardi, *Yardi Announces the Elimination of ACH Rent Payment Fees* (Oct. 31, 2023),  
[https://www.yardi.com/news/press-releases/yardi-announces-the-elimination-of-ach-rent-](https://www.yardi.com/news/press-releases/yardi-announces-the-elimination-of-ach-rent-payment-fees/)  
 25 [payment-fees/](https://www.yardi.com/news/press-releases/yardi-announces-the-elimination-of-ach-rent-payment-fees/) (last visited Nov. 2, 2023).

26 <sup>67</sup> *Yardi Adds Two Revenue Management Experts to its Yardi RENTmaximizer Team*, *supra*  
 note 5.

27 <sup>68</sup> *Id.*

28 <sup>69</sup> *Id.*

<sup>70</sup> *Id.*

income while maintaining occupancy, it simplifies the process by eliminating rent rate guesswork and traditional sales devices such as concessions and specials.”<sup>71</sup>

67. In a since-deleted post from 2015 on its corporate blog, Yardi elaborated on the importance of automated pricing, posing the rhetorical question: “If you have to approve prices from your pricing technology, do you really have a pricing system?” It went on to note that “[o]ne of the fundamental design elements of the Yardi RENTmaximizer™ revenue management system is to remove the need for human intervention wherever possible. The revenue manager support team has many configuration options at its disposal in order to establish a performance level that meets the strategic objectives for pricing your property.”

Another portion of the post elaborates further:

**Efficiency Through Technology**

Technology is supposed to make us more efficient in how we apply our expensive human labor. When you pay double for technology plus for someone to approve that technology’s output, you are not getting efficiency out of the technology. This is akin to a pilot having to approve the actions of the autopilot prior to the autopilot making the adjustments. While the pilot should check the overall progress of the autopilot once in a while to make sure things stay on track, requiring constant supervision and approval makes no sense.

We encourage our clients to be actively engaged in their pricing activity. We think it is critical for a person to keep watch over any automated system to ensure that its inputs are in line with the pricing strategy for a property. However, we do not believe it is an efficient use of a person’s time to be trained or to have to keep up to date with the technical nuances and options the technology uses to convert the strategic vision into actual pricing action. That is why Yardi supplies a technical specialist who is well-versed in the pricing engine technology. We feel that our clients’ time is more valuable in making sure the overall pricing activity supports the company’s business objectives.<sup>72</sup>

<sup>71</sup> See *Rockbridge Group*, *supra* note 6.

<sup>72</sup> Yardi, *The RENTmaximizer Pricing System: Establishing an Automated Pricing System* (Mar. 1, 2015), available at <https://web.archive.org/web/20210302112741/https://www.yardi.com/blog/uncategorized/the-rentmaximizer-pricing-system/12666.html>.

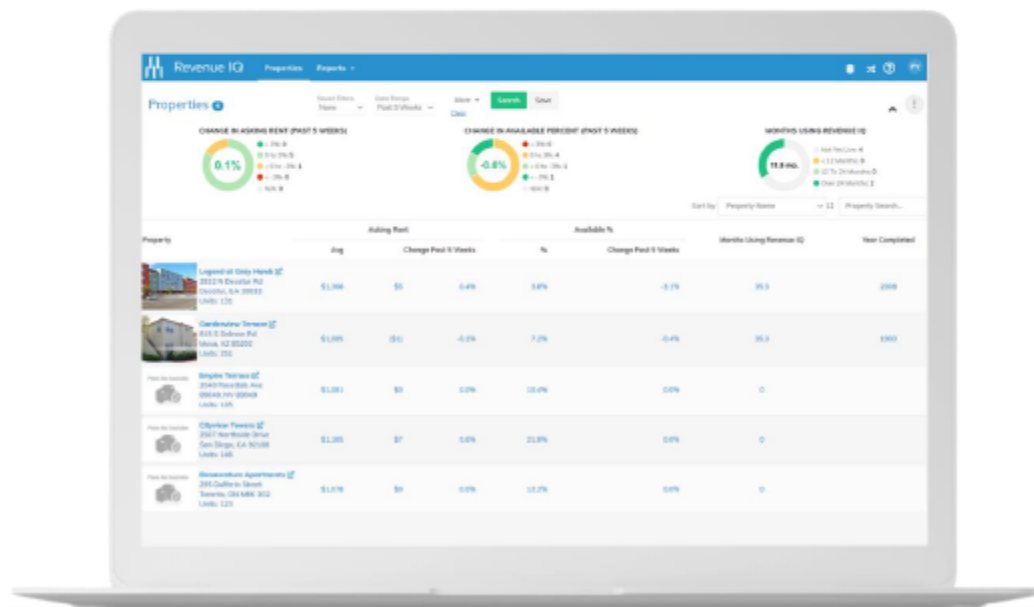


68. Yardi continues to emphasize the automated nature of the pricing adjustments provided by RENTmaximizer. For example, in a private 2023 presentation to a potential client, Yardi touted that the software “automates profitable decision-making across your organization” while providing “full visibility into...your competitive position in the market”:

### Yardi Revenue IQ

Get better results with Yardi Revenue IQ. Built into your Yardi platform, this dynamic revenue management system optimizes revenue by pricing leases using the balance between your real-time inventory, traffic, and market conditions. Yardi Revenue IQ creates full visibility into your rent movement, financial and operational performance, and your competitive position in the market. It automates profitable decision-making across your organization.

Market economic data and automated market surveys improve pricing decisions. You can benchmark results against market and submarkets and compare occupancy trends with the market. Dedicated support from an experienced revenue manager ensures your success.



69. On information and belief, RENTmaximizer is today widely used throughout the United States to set multifamily rental prices. In 2013, for instance, Dharmendra Sawh (then Yardi’s “principal for revenue management”) stated publicly that RENTmaximizer was used to price 8 million residential units around the world.<sup>73</sup> Two years later, in a now-deleted blog post

<sup>73</sup> Nelson, *supra* note 29.

on Yardi’s website, Yardi staff wrote that “Yardi RENTmaximizer was quickly adopted by Yardi clients from the beginning” and that “its adoption rate continues to grow exponentially,” and identified six exemplar markets (Northern Virginia, North Dallas, West Houston, Denver, Phoenix, and Orange County) “in which a significant number of properties use Yardi RENTmaximizer.”<sup>74</sup>

70. As a recognized “market leader in real estate technology,”<sup>75</sup> it is reasonable to believe that RENTmaximizer is used far more widely today. By contrast, in September 2020, Yardi’s leading competitor RealPage—which also makes a product that automatically sets residential real estate lease prices—claimed that its own revenue management software was used to set the price for “over four million [multifamily] units.”<sup>76</sup> Consistent with this, CW 7, who worked at Yardi between 2019 and 2021 as a senior account executive, stated that she saw clients moving from RealPage’s YieldStar product to RENTMaximizer during her time at Yardi, and that RENTMaximizer “performed equally as well as our competitors” from a sales perspective, according to the reports Yardi’s marketing team shared internally.

71. According to Yardi’s publicly-available promotional materials, a key input to RENTmaximizer’s pricing algorithm, or “engine,” is competitor pricing data. Specifically, RENTmaximizer asks users to input their data, such as rental rates and occupancy, into its system; meanwhile, the system automatically incorporates market-specific information on “comparative rent” to, in Yardi’s words, give users “accurate and timely information regarding your market—including every comp and how you compete”<sup>77</sup>—or what it also calls “complete

<sup>74</sup> Yardi, *Yardi RENTmaximizer Market Analysis: 2013 Performance Results*, The Balance Sheet: Yardi Corporate Blog (Mar. 1, 2015), available at <https://web.archive.org/web/20210302115856/https://www.yardi.com/blog/uncategorized/yardi-rentmaximizer-market-analysis/12670.html>.

<sup>75</sup> Redirect Consulting, *The Year in Yardi: 2017 Edition*, [https://www.redirectconsulting.com/hubfs/eBooks/2017/yardi%202017/redirect\\_ebook\\_This-Year-in-Yardi\\_2018-06-27.pdf](https://www.redirectconsulting.com/hubfs/eBooks/2017/yardi%202017/redirect_ebook_This-Year-in-Yardi_2018-06-27.pdf) (last visited Sept. 7, 2023).

<sup>76</sup> Lyman, *supra* note 30.

<sup>77</sup> *Yardi Elevate*, *supra* note 10.

visibility,” including “performance benchmarking” “compared to the market, submarket, and competition”:

## YARDI RENTMAXIMIZER

Increase rental income and improve occupancy with a dynamic revenue management system built into Yardi Voyager and Asset IQ. Designed to optimize revenue by pricing leases using the balance between your real-time inventory, traffic and market conditions from Yardi Matrix, RENTmaximizer provides complete visibility into your rent movement and your financial and operational performance. RENTmaximizer is intuitive and reacts to other operational activities, from site improvements to marketing. Get accurate and timely information regarding your market – including every comp and how you compete.



RENTmaximizer allows for fast adjustment to market conditions and changes in your inventory and traffic – while adjusting for cost constraints such as vacancy loss, turnover costs, inventory hold days and lease expiration management.

### COMPLETE VISIBILITY

RENTmaximizer provides holistic revenue intelligence for your operations team. With this transparent system you'll see everything from rental rates and occupancy data to property performance benchmarking (compared to the market, submarket and competition). Prospects and residents will gain various pricing options, while your managers will enjoy greater confidence that you are delivering the best possible rental prices.

### BETTER RESULTS

This intuitive, transparent pricing system empowers your sales force, provides clear and comprehensive reporting and promotes adoption throughout your organization. Leases are priced by the system daily, which allows for fast adaptation to market conditions and changes in your inventory and traffic, while adjusting for cost constraints such as vacancy loss, turnover costs, inventory hold days and lease expiration management.

### BETTER SERVICE

You manage your business, we manage your pricing. Only Yardi provides you with a dedicated revenue manager with valuable industry experience along with your revenue management software. Your dedicated revenue manager will get to know your business processes, assets and goals to provide superior support and will work with you to maximize your returns. And as a RENTmaximizer client, you'll receive this service and training continuously to promote ongoing success.



RENTmaximizer provides total visibility into your vacancy forecast.



Historical information and other metrics help you manage and forecast lease expirations.

Clear and comprehensive metrics focus on all operational components that drive revenue including rental income, concessions, occupancy and rental rate, not just pricing. The Performance Benchmark Detail report allows you to view data across several months.



### MARKET INTELLIGENCE

Yardi Matrix provides nationwide intelligence on markets, submarkets, competition, developments, rents, occupancy and more. This data delivers accurate indicators of economic trends and performance and helps you price apartments profitably. When this market-specific data is incorporated with your RENTmaximizer data, you can accurately benchmark performance and factor it into rent projections and calculations which enhances your revenue management strategy and helps boost the performance of individual assets.

## KEY FEATURES

- Industry benchmarking data provides complete visibility for more successful pricing
- Multiple pricing options fit customer needs and address fair housing concerns
- Predictable daily pricing allows for fast adjustment to market conditions and your inventory
- Analytical reporting provides complete intelligence on components that drive maximum revenue
- Superior service and ongoing training from experienced revenue managers



**HAGENS BERMAN**

1301 Second Avenue, Suite 2000, Seattle, WA 98101  
(206) 623-7292 OFFICE (206) 623-0594 FAX



72. Leveraging data gathered from RENTmaximizer users as well as comparative rent, RENTmaximizer’s rental pricing algorithm then calculates a “rent recommendation” that users can—and are encouraged to—automatically adopt. These prices are updated “daily.” In an alternative version of the same presentation above available on Yardi’s website, Yardi prominently advertises that RENTmaximizer’s “pricing engine” operates on a positive “feedback loop” that allow users to “beat the market by a minimum of 2%” and “gain[] on average more than 6% net rental income”<sup>78</sup>:

## Better Results

Clients using RENTmaximizer have gained on average more than 6% net rental income growth while improving occupancy. And, RENTmaximizer properties consistently beat the market by a minimum of 2%. This intuitive, transparent pricing system empowers your sales force, provides clear and comprehensive reporting and promotes adoption throughout your organization. Leases are priced by the system daily, which allows for fast adjustment to market conditions and changes in your inventory and traffic, while adjusting for cost constraints such as vacancy loss, turnover costs, inventory hold days and lease expiration management.

<sup>78</sup> *Yardi Multifamily Suite*, *supra* note 8.



73. Similarly, in a 2018 press release, Yardi noted that its pricing algorithm generates rents that “maximize rental income” for a user (including Landlord Defendants),<sup>79</sup> and that its process is “transparent” to property managers so that “they can understand what factors are influencing pricing.”<sup>80</sup> Other Yardi promotional materials also emphasize the extent to which Yardi gives its clients access and insight into competitor data. For example, a separate 2017 Yardi press release touts the fact that RENTmaximizer “lets clients know their markets in real time, including how they compare with competing communities”:

Yardi RENTmaximizer helps clients drive revenue with clear, comprehensive metrics focusing on operational components including rental income, concessions, occupancy and rental rates — not just pricing. The system tracks rent movement and lets clients know their markets in real time, including how they compare with competing communities.

According to Sarah Oglesby-Battle, executive vice president of Beztak’s management division, “In the last 12 months, we’ve grown to over 17,000 multifamily units under management. With RENTmaximizer, we have a dynamic system that pushes rents without sacrificing occupancy, which gives our staff confidence. With automated pricing, RENTmaximizer eliminates the fear factor of exposure that is a natural concern for property and regional managers. RENTmaximizer factors in historical and relevant data to assure us that we will get the traffic and leases we need to meet our revenue goals.”<sup>81</sup>

74. A 2018 post discussing lessor DEELS Properties’ “significant rental income games” as a result of RENTmaximizer use also emphasizes that Yardi’s prices take into account “competitor rates”:

Having a mathematical process that determines and adjusts prices based on real data and ever-changing market conditions was critical for DEELS. According to Hameiri, DEELS now adjusts prices daily based on a set of criteria and formulas that streamline the process. *The result is up-to-date prices that take into consideration*

<sup>79</sup> *DEELS Properties Gets Results with Yardi RENTmaximizer*, Business Wire (Feb. 26, 2018), <https://www.businesswire.com/news/home/20180226005236/en/DEELS-Properties-Gets-Results-with-Yardi-RENTmaximizer>.

<sup>80</sup> *Id.*

<sup>81</sup> *Beztak Grows Rental Income with Yardi RENTmaximizer*, *supra* note 19.

supply and demand broken down by traffic, competitor rates, vacancies and notices.<sup>82</sup>

75. A publicly available Yardi user manual created by property manager Towne Properties indicates how RENTmaximizer is used in practice to automatically set prices.<sup>83</sup> The manual explains that, to set price for a unit, a property manager needs to enter a specific move-in time frame and lease term into the RENTmaximizer system, and the system will populate the “best price” for that selected unit. It’s as simple as Yardi’s official brochure put it: “You manage your business, we manage your pricing.”

## RENT MAXIMIZER PRICING REPORT

1. From your Dashboard Home page, click on Reports > RENTmaximizer > RENTmaximizer Revenue Management Reports.

	Resident Activity	Unit Status
Move In	0	Total Units
Move Out	0	Leased Units
Property	0	Occupied Unit
Property - Residential	6	Available Unit
30 days	23	Model/Drawn

2. Select the Unit Best Price Listing Report, choose your Property and select today's date – Click View Report.

**RENTmaximizer Revenue Management Reports**

Report:

Client:  Property:

Date:  Term:

Sort by:

14 of 1 of 1 > > > 100% Find & Next

## Unit Best Price Listing for Property: 0277 - Monmouth Row for 4/18/2018

Unit	Unit Type	Description	Unit Status	Available Date	Date Vacant	Amenities	Best Price	Term	Move In Date Range
1110	0277C	The Saratoga (2 bed - 2 bath)	Vacant Unrented Ready	Now	3/31/2018	Corner Bay Window 200, Third Floor 260	<b>\$1531</b>	18	4/18/2018 5/1/2018
1112G	0277B	The Mouthroom (1 bed - 1 bath)	Vacant Unrented Ready	Now	12/21/2017	Patio Balcony, Second Floor	<b>\$1063</b>	18	4/18/2018 5/1/2018
1113C	0277C	The Monroe (1 bed - 1 bath)	Vacant Unrented Ready	Now	3/13/2018	Patio Balcony	<b>\$1038</b>	18	4/18/2018 5/2/2018

3. This will populate the Best price (with the specific move in time frame and lease term). If your prospect is looking for a different move in date or different lease term, just click on the monthly rent amount, and that will populate all your options for that specific unit.

76. Similarly, other slides in the presentation indicate that, unless overridden, “property pricing is *controlled* by” RENTmaximizer:

<sup>82</sup> Noam Hameiri, *Pricing That Wins – Interview*, LinkedIn (June 29, 2018), <https://www.linkedin.com/pulse/pricing-wins-interview-noam-hameiri-mba/> (emphasis added).

<sup>83</sup> See Towne Properties Yardi Manual, available at <https://docplayer.net/186429673-Towne-properties-yardi-manual.html> (last visited Sept. 7, 2023).



**Renewal Proposal Filter**

Property pricing is controlled by Revenue Management.

**Prop List** 0092

**Agent** Arielle Curry

**Batch Description** JenniferMason@townproperties.com - 8/3/2019 9:41:17 AM

**Unit Type**

**Unit**

**Resident**

**Status** Current  
Eviction  
Notice

**Lease Expiration** 11/01/2019 11/30/2019

**Include MTN?** Exclude

**Include Specials?** ☐

**Update Rentable Items to Market Rent?** No

**Proposal Exp. Date** 08/31/2019

**Submit** **Help**

77. Public statements by other property managers indicate that RENTmaximizer is commonly used to fully automate pricing, consistent with Yardi's public statements and marketing materials. For example:

- Jennifer van Arcken, director of information systems for lessor BSR Trust, stated in a 2012 press release that with RENTmaximizer, "all [property managers] have to do is enter some market study data every month, and RENTmaximizer does the rest."<sup>84</sup> According to the press release, revenue across BSR Trust's 7,000 units increased by 3.34% after RENTmaximizer was implemented, and RENTmaximizer "improved business performance" by, among other things, "eliminating concessions":

Yardi RENTmaximizer also improves BSR Trust's business performance by eliminating concessions, reducing bad debt and increasing occupancy. "By giving us the market rate for every unit, RENTmaximizer eliminates guesswork by our property managers," van Arcken said. "It also reduces incentive for residents to sign a lease just to get a move-in special, then leave soon after. Furthermore, we're signing more leases for 15 months rather than

<sup>84</sup> *BSR Trust LLC Increases Rental Income with Yardi RENTmaximizer*, Business Wire (July 19, 2023), <https://www.businesswire.com/news/home/20120719006370/en/BSR-Trust-LLC-Increases-Rental-Income-with-Yardi-RENTmaximizer>.

the usual 12 months, meaning that high-quality residents are here for the long haul.”

- Amanda McHugh, training and development manager of lessor Rockbridge Group, stated in a 2016 press release that Rockbridge’s adoption of RENTmaximizer allowed it to “take the guesswork out of pricing” and “eliminate[] all concessions and specials.”<sup>85</sup> As a result, Rockbridge “achieved an average 48% increase in gross potential rent.”<sup>86</sup>
- Ryan Kissell, controller of lessor Summit Management Services, stated in a 2012 press release that “RENTmaximizer’s automated pricing matrix has allowed us to eliminate concessions.”<sup>87</sup>
- A February 5, 2014 article reports that the “revenues” of McCaffery Interests Inc., a Chicago-based real estate developer, “have been boosted by Yardi RENTmaximizer, which automates the process of calculating best rents.” In the article, Yvonne Jones, McCaffery’s managing director of asset and property management, stated: “RENTmaximizer has pushed our site teams to think more about pricing and occupancy. We’re pricing on a daily basis, whereas before we might have looked at pricing only quarterly and not adjusted to increased traffic coming to the property . . . We expect that by the end of 2013 we will increase our revenues by at least 2% by having RENTmaximizer in place.”<sup>88</sup>

78. Finally, Landlord Defendants and Yardi appear to collectively monitor and enforce compliance with Yardi’s automated pricing. Specifically, Yardi promotional materials state that Yardi provides its RENTmaximizer users with “dedicated revenue managers” who

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<sup>85</sup> *Id.*

<sup>86</sup> See *Rockbridge Group*, *supra* note 6.

<sup>87</sup> *Yardi RENTmaximizer Gives Summit Management Services Inc. New Rental Pricing Insight*, Business Wire (Jan. 31, 2012), <https://www.businesswire.com/news/home/20120131006159/en/Yardi-RENTmaximizer-Gives-Summit-Management-Services-Inc.-New-Rental-Pricing-Insight>.

<sup>88</sup> *McCaffery Interests Leverages Yardi’s Single-Platform Approach for Efficient Property Management*, FM Link (Feb. 5, 2015), <https://www.fmlink.com/articles/mccaffery-interests-leverages-yardis-single-platform-approach-for-efficient-property-management/>.

regularly meet and communicate with property managers regarding their pricing improvements advice to “maximize returns”<sup>89</sup>:

## Better Service

You manage your business, we manage your pricing. Only Yardi provides you with a dedicated revenue manager with valuable industry experience along with your revenue management software. Your dedicated revenue manager will get to know your business processes, assets and goals to provide superior support and will work with you to maximize your returns. And as a RENTmaximizer client, you'll receive this service and training continuously to promote ongoing success.

79. Consistent with this, Terri Downen, senior vice president of sales for Yardi, stated in a 2017 press release that “[p]roperty managers are guided to pricing that meets business goals, with the support of a dedicated revenue manager included with our solution.”<sup>90</sup>

80. Similarly, CW 7, who worked at Yardi between 2019 and 2021 as a senior account executive, stated that Yardi provided revenue managers to each client that purchased RENTMaximizer, and working with a revenue manager did not cost extra. Yardi revenue managers “basically went through all your properties and rates” and “helped set some limits.” Yardi revenue managers met with clients monthly to conduct a “pretty thorough review” of how clients were using the product and whether it was working for them, CW 7 explained. Although the type of employee at the client company with whom Yardi revenue managers communicated varied based on the client, with larger clients, it was typically a revenue manager, CW 7 said.

81. Lessors have indicated in public statements that Yardi’s pricing advisors are intimately involved in their business operations. Noam Hameiri, senior vice president of operations at lessor DEELS Properties, stated in a 2018 article that “the extensive reporting and the weekly phone call with our dedicated RENTmaximizer expert are some of the best parts of the system.”<sup>91</sup> Adam Goldfarb, vice president for lessor Manco Abbott, stated in a 2015 press release that “[h]aving a dedicated revenue manager working with us from the Yardi

<sup>89</sup> *Yardi Multifamily Suite*, *supra* note 8.

<sup>90</sup> *Beztak Grows Rental Income with Yardi RENTmaximizer*, *supra* note 19.

<sup>91</sup> Hameiri, *supra* note 82.

1 RENTmaximizer team is a huge benefit. If our staff or property owners question any of our  
 2 rates, we have our Yardi RENTmaximizer expert who can dig deeper to support our pricing —  
 3 and that gives our organization and clients great confidence.”<sup>92</sup> A 2016 press release describing  
 4 lessor Singh Management’s use of RENTmaximizer likewise states that “[a]s part of using  
 5 RENTmaximizer, Singh is provided a dedicated Yardi RENTmaximizer analyst. Regular  
 6 meetings between the analyst and Singh’s onsite staff and regional managers provide expert  
 7 insight and valuable advice where pricing improvements can be made.”<sup>93</sup>

8 **B. Yardi and Landlord Defendants conspired to eliminate competition by outsourcing**  
 9 **independent pricing and supply decisions to RENTmaximizer.**

10 82. In a competitive market, property managers in the multifamily market price rents  
 11 independently based on their own assessment of how best to compete with other properties—for  
 12 example, by offering concessions, specials, or otherwise lowering rents.

13 83. As Yardi has acknowledged, competitive pressures effectively affect strategies  
 14 employed by owners to optimize income.<sup>94</sup> When demand fell during COVID-19, for example,  
 15 “to maintain occupancy rates,” apartment owners employed strategies including “rolling over  
 16 leases with no bump in rent and increasing use of concessions, mainly by offering periods of  
 17 free rent.”<sup>95</sup> This emphasis on maintaining occupancy rates, instead of rental prices, makes  
 18 economic sense because every day a unit is left empty is, in a competitive market, a financial  
 19 loss to property owners.

20 84. In addition, without knowing their competitors’ pricing strategies, property  
 21 management companies usually need to make a judgment call and set their prices within a range  
 22 that optimizes their competitive position in attracting renters. Offering lower rates and

23 <sup>92</sup> *Manco Abbott Inc. Achieves Rental Growth, Gains Expert Pricing Insight with Yardi*  
 24 *RENTmaximizer*, *supra* note 14.

25 <sup>93</sup> *Singh Management Gains Revenue and Occupancy Growth with Yardi RENTmaximizer*,  
 26 Business Wire (Feb. 23, 2016), <https://www.businesswire.com/news/home/20160223005007/en/Singh-Management-Gains-Revenue-and-Occupancy-Growth-with-Yardi-RENTmaximizer>.

27 <sup>94</sup> Yardi Matrix, Bulletin, *The Rise and Fall of Concessions: Is the Market Resetting?* (Jan.  
 28 2021), available at <https://www.yardimatrix.com/Publications/Download/File/1190-MatrixMulti-familyConcessionsBulletin-January2021>.

<sup>95</sup> *Id.*

1 concessions are among the most effective ways to win over the race. In other words, without  
 2 collusion, a property manager could not unilaterally raise rents above market rates because  
 3 doing so would result in tenants lost to competitors (who offered market rates). With collusion,  
 4 however, this competition is avoided.

5 85. To lessen competition for renters, Yardi and Landlord Defendants came up a  
 6 new strategy: collectively adopt a coordinated pricing software implemented and enforced by  
 7 Yardi through RENTmaximizer. The software facilitates pricing collusion by—in the words of  
 8 Yardi’s own senior vice president of sales, Terri Downen—“eliminating rent rate guesswork and  
 9 traditional sales devices such as concessions and specials,”<sup>96</sup> and consequently increasing prices  
 10 for Landlord Defendants regardless of market conditions. What Ms. Downen describes is the  
 11 elimination of a pricing strategy characteristic of a competitive multifamily rental market.

12 86. Specifically, Landlord Defendants agree to provide their competitively sensitive  
 13 data to RENTmaximizer with the understanding that such data will be shared with  
 14 competitors.<sup>97</sup> Yardi also proudly advertises that its database provides nationwide “clear and  
 15 comprehensive” metrics on “markets, submarkets, competition, developments, rents, occupancy  
 16 and more.”<sup>98</sup> Such market-specific metrics then incorporate the data an individual  
 17 RENTmaximizer user enters in the system, which enables Landlord Defendants to “accurately  
 18 benchmark performance.”<sup>99</sup> As explained in a 2017 Yardi press release, with real-time access to  
 19 competitors’ nonpublic data, Yardi RENTmaximizer “lets clients know their markets in real  
 20 time, including how they compare with competing communities.”<sup>100</sup>

21 87. This strategy also allows landlords to de-prioritize their traditional focus on  
 22 maintaining occupancy rates, the hallmark of a competitive market. In a now-deleted 2014 post  
 23

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24 <sup>96</sup> See *Rockbridge Group*, *supra* note 6.

25 <sup>97</sup> As discussed below, CW 6 stated that all Yardi clients – or Voyager clients –  
 26 contractually agree to share pricing and occupancy data with Yardi and to allow Yardi to use  
 “aggregated data” as part of Matrix and RENTMaximizer.

27 <sup>98</sup> *Yardi Elevate*, *supra* note 10.

28 <sup>99</sup> *Id.*

<sup>100</sup> *Beztak Grows Rental Income with Yardi RENTmaximizer*, *supra* note 19.

1 on Yardi's blog titled "Revolutionary Revenue," in which Yardi boasted about  
 2 RENTmaximizer's market-beating results, Yardi recapped a July 2014 meeting at which  
 3 Dharmendra Sawh (then Yardi's "principal for revenue management"):

4 addressed the Canadian Federation of Apartment Associations'  
 5 Rental Housing Conference 2014 in Vancouver, British Columbia  
 6 with an introduction to revenue management and opportunities for  
 7 its use in Canadian markets. In September 10, he'll speak on a panel  
 8 at the Canadian Apartment Investment Conference in Toronto,  
 9 Ontario.

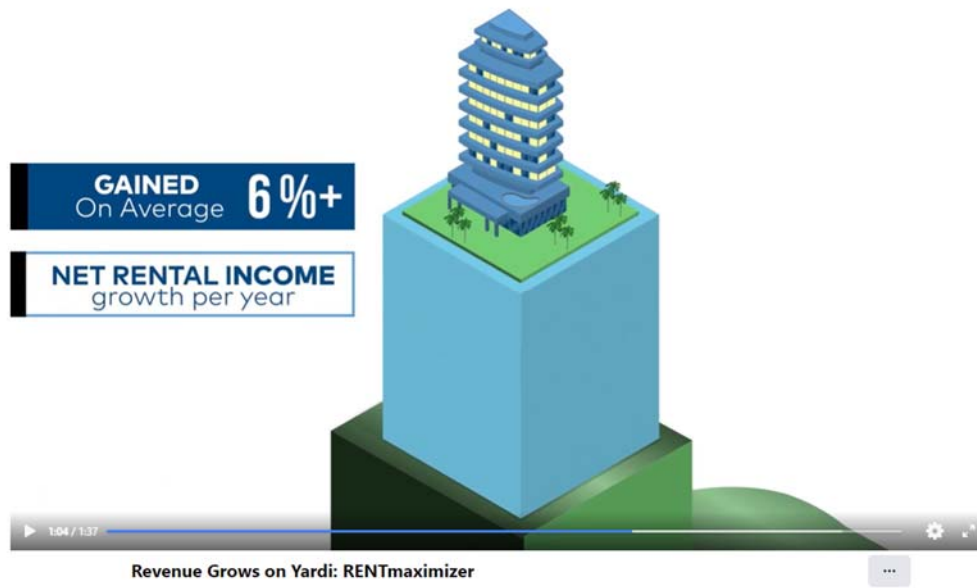
10 *"In addition to government regulation, Canadian apartments are  
 11 typically run with very high occupancy rates. It may require a  
 12 change in mentality, but there are some real opportunities to  
 13 realize rent gains with the use of a revenue management solution,"*  
 14 Sawh said.<sup>101</sup>

15 88. Remarkably, Yardi's own promotional materials emphasize, as noted above, that  
 16 Yardi allows RENTmaximizer users to "*beat the market.*" And more broadly, Yardi  
 17 prominently advertises RENTmaximizer, and its automatic pricing algorithm, as a means to  
 18 achieve supracompetitive rent growth. A 2017 promotional video states, for example, that  
 19 "revenue grows on Yardi" and that (consistent with other marketing materials) clients using  
 20 RENTmaximizer "have gained on average more than 6% net rental income growth"<sup>102</sup>:  
 21  
 22  
 23  
 24

25  
 26 <sup>101</sup> Leah Etling, *Revolutionary Revenue: Market Data Insight* (Aug. 27, 2014), The Balance  
 27 Sheet: Yardi Corporate Blog, available at  
 28 <https://web.archive.org/web/20140908043659/https://www.yardi.com/blog/news/revolutionary-revenue/11339.html> (emphasis added).

<sup>102</sup> *Revenue Grows on Yardi: RENTmaximizer* (video), *supra* note 7.





89. While discovery will reveal the specific identities and roles of all relevant participants, Yardi has operated this scheme through high-ranking personnel, including Dharmendra Sawh, Yardi’s “Industry Principal” for revenue management<sup>103</sup> and Terri Dowen, Yardi’s senior vice president of sales. Both Sawh and Dowen heavily promoted RENTmaximizer and its impact on pricing and profitability for Landlord Defendants. According to CW 6, the sales team selling RENTmaximizer was a small group with little turnover and included, among others, Jeffrey W. Adler, Vice President of Yardi Matrix.

90. Lessors have publicly praised, consistent with Ms. Dowen’s comments, the fact that Yardi liberates them from the traditional and legal forms of competition found in a competitive market (e.g., discounts and concessions) and allows them to raise prices. In other words, by agreeing to implement and abide by a single, common pricing algorithm that incorporates shared competitively sensitive information provided by Landlord Defendants, RENTmaximizer provides Landlord Defendants with the confidence, or “discipline,” to inflate rents without fearing such pricing strategy would be undercut by competitors. For example:

<sup>103</sup> According to Mr. Sawh’s LinkedIn profile, he is “[r]esponsible for the entire product launch of the new Revenue Management Product – RENTmaximizer” and provides “[s]trategic leadership in Product Management, Sales, Implementation, Training, Marketing.” <https://www.linkedin.com/in/dhar-sawh-9a38543/>.

- 1 • In a 2017 press release, Sarah Oglesby-Battle, executive vice president of lessor  
2 Beztak’s management division, stated that “RENTmaximizer eliminates the fear factor  
3 of exposure that is a natural concern for property and regional managers.  
4 RENTmaximizer factors in historical and relevant data to assure us that we will get the  
5 traffic and leases we need to meet our revenue goals.”<sup>104</sup>
- 6 • In a 2017 press release, lessor KRE Group stated that it used RENTmaximizer to price  
7 three New Jersey properties, and that it “appreciate[d] that RENTmaximizer takes the  
8 guesswork out of pricing and automates assessments using inventory and market  
9 data.”<sup>105</sup> Jason Segal, director of residential leasing for KRE Group, stated that before  
10 using Yardi RENTmaximizer, “[t]here was always uncertainty about various factors  
11 including holding units, leasing notice units and structural vacancy, which really  
12 impacted the budget. With RENTmaximizer we have a tool to simplify those decisions  
13 and validate rents.”<sup>106</sup>
- 14 • In a 2016 press release, Amanda McHugh, training and development manager of lessor  
15 Rockbridge Group, stated that with RENTmaximizer, Rockbridge “ha[d] achieved an  
16 average 48% increase in gross potential rent” and that “[t]hanks to RENTmaximizer, we  
17 have eliminated all concessions and specials.”<sup>107</sup>
- 18 • In a 2015 press release, Philip Nored, owner and managing partner of Landlord  
19 Defendant HNN Associates, LLC, stated that “RENTmaximizer has taken the  
20 guesswork out of our rental pricing and lease terms, and boosts pricing performance  
21 through an intelligent system of measurements, fixed factors *and discipline*.”<sup>108</sup>

22  
23 <sup>104</sup> *Beztak Grows Rental Income with Yardi RENTmaximizer*, *supra* note 19.

24 <sup>105</sup> *KRE Group Grows Profits and Occupancy with Yardi RENTmaximizer*, Business Wire  
25 (Mar. 14, 2017), <https://www.businesswire.com/news/home/20170314005389/en/KRE-Group-Grows-Profits-and-Occupancy-with-Yardi-RENTmaximizer>.

26 <sup>106</sup> *Id.*

27 <sup>107</sup> *See Rockbridge Group*, *supra* note 6.

28 <sup>108</sup> *HNN Associates, LLC Optimizes Rental Pricing Performance with Yardi RENTmaximizer*, *supra* note 17 (emphasis added).

- 1 • In a 2015 press release, Brad Minsley, co-owner of lessor 10 Federal, stated that, with  
2 RENTmaximizer, 10 Federal had seen “3.5% rental income growth, and 30% or greater  
3 improvement in their lease terms,” and that “[t]hanks to RENTMaximizer we are  
4 signing new leases, our renewal rates are sustainable, and *we don’t have to offer*  
5 *concessions.*”<sup>109</sup>
- 6 • In a 2015 press release, Scott Brown, president of lessor Grubb Properties, stated that  
7 RENTmaximizer “gives our ownership groups much more confidence. Our clients can  
8 view comprehensive reports with drilldown into their pricing movement, which ensures  
9 complete trust in the system.”<sup>110</sup> He reported that “[b]y providing detailed and  
10 transparent [pricing] reporting, Yardi RENTmaximizer has also enabled us to save time  
11 and gain efficiency by eliminating weekly pricing calls with our owners.”
- 12 • Brantley White, president of lessor Ardmore Residential, announced in a 2016 press  
13 release that Ardmore Residential had raised rents 5-6% since its implementation of  
14 Yardi RENTmaximizer in 2016, and appreciated that “Yardi RENTmaximizer has  
15 allowed us to push rents more aggressively and takes more human error out of the  
16 process.”<sup>111</sup> He candidly acknowledged that “[w]e simply wouldn’t have raised rents  
17 that much or that quickly on our own.”<sup>112</sup>
- 18 • As noted above, Ryan Kissell, controller of Landlord Defendant Summit Management  
19 Services, stated in a 2012 press release that that “RENTmaximizer’s automated pricing  
20 matrix has allowed us to eliminate concessions.”<sup>113</sup> The same press release states that  
21

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22  
23 <sup>109</sup> *Id.* (emphasis added).

24 <sup>110</sup> *Grubb Properties Maximizes Pricing, Achieves Longer Lease Terms with Yardi*  
25 *RENTmaximizer*, Business Wire (Dec. 1, 2015), <https://www.businesswire.com/news/home/20151201005433/en/Grubb-Properties-Maximizes-Pricing-Achieves-Longer-Lease-Terms-with-Yardi-RENTmaximizer>.

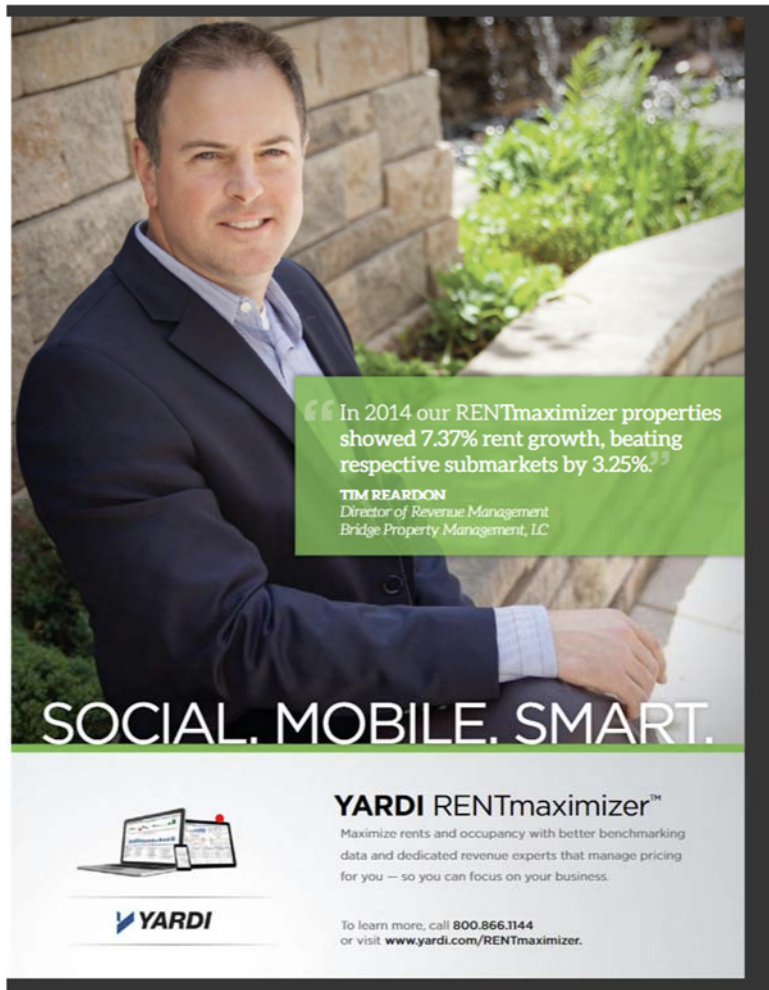
26 <sup>111</sup> *Ardmore Residential Raises Rents 5-6% with Yardi RENTmaximizer*, *supra* note 20.

27 <sup>112</sup> *Id.*

28 <sup>113</sup> *Yardi RENTmaximizer Gives Summit Management Services Inc. New Rental Pricing*  
*Insight*, *supra* note 49.

Summit Management Services saw a revenue increase of 4.63% in the third quarter of 2011 after the company adopted RENTmaximizer.<sup>114</sup>

91. Yardi and Defendant Landlords worked together to publicly advertise the success of RENTmaximizer at inflating prices, and to invite other Defendants to join their scheme. For example, the following advertisement by Yardi, featuring a quote from Defendant Landlord Bridge Property Management, appeared in a 2016 edition of the Multifamily Executive magazine, a publication specifically intended for employees at multifamily operators:



92. Lessors have also publicly praised (a) the insight into competitors' pricing that Yardi provides and (b) the supracompetitive returns it generates. Indeed, much of this praise is

<sup>114</sup> *Id.*

found in numerous Yardi press releases touting its achievements in raising rents for their clients in the multifamily market. For example:

- In a 2016 press release, Jeffrey Denson, the owner and COO of Landlord Defendant Dalton Management, stated that Dalton Management was able to increase rent per unit without losing business to its competitors as “RENTmaximizer has . . . made Dalton Management better aware of how its properties compare to the rest of the market,” explaining further that Dalton was “able to raise rents at a property we thought was keeping up—now we’re getting \$100 more per unit and maintaining occupancy.”<sup>115</sup>
- A “success story” available on Yardi’s website states that lessor Avesta had seen “a significant gain [in revenue] after only six months” of implementing RENTmaximizer.”<sup>116</sup> Specifically, Avesta announced that for every dollar it invested in the RENTmaximizer system, it achieved a return of nearly \$30. The press release quotes Will Newton, Director of Support Systems at Avesta, as stating: “[T]hanks to the revenue and leasing metrics, along with the support of our dedicated Yardi RENTmaximizer pricing specialist, we don’t leave money on the table.”
- A 2016 press release states that lessor CKR Property Management saw substantial rental revenue growth as a result of adopting RENTmaximizer. The press release quotes Caroline Kane, CEO of CKR: “Overall, our rental revenue is up 8% year over year . . . one property that previously struggled is up 28%. Yardi RENTmaximizer had a lot to do with that success.”<sup>117</sup>
- According to a 2015 press release, Landlord Defendant Bridge Property Management reported that the company used RENTmaximizer to price “approximately 27,000

<sup>115</sup> *Dalton Management Reports Increased Revenue Using Yardi RENTmaximizer*, *supra* note 24.

<sup>116</sup> *Avesta*, *supra* note 25.

<sup>117</sup> *CKR Property Management Grows Rental Revenue with Yard RENTmaximizer*, Business Wire (Oct. 27, 2016).

multifamily units,” and had reported 9.4% year-over-year rental income growth “for properties priced with Yardi RENTmaximizer.”<sup>118</sup>

- According to a 2016 press release, within five months of using RENTmaximizer, lessor Singh Management found that properties that implemented RENTmaximizer performed at “7% higher” than the properties in the portfolio not yet using the system, and “by the fifth month, they reached rental growth of 18.5%.”<sup>119</sup>
- Another “success story” available on Yardi’s website states that Landlord Defendant Pillar Properties’ use of RENTmaximizer “drive[s] higher revenue, manage[s] costs and balance[s] risk.”<sup>120</sup>
- During a February 18, 2016 earnings call discussing Landlord Defendant Morguard’s Q4 2015 earnings, Senior Vice President John Talano, who is responsible for Morguard’s U.S. operations and oversees Morguard’s residential holdings, was asked whether Morguard was “still seeing pretty strong rental rate growth.” Talano responded: “yes, yes, absolutely. We implemented RENTmaximizer, which is a revenue modeling software and we’re monitoring that literally on a daily basis. Good strong rents growth in Florida, Atlanta, Dallas, Texas and in Colorado.” Elsewhere during the call, Talano stated that Morguard “experienced robust rent growth with smaller markets like Alabama and Louisiana experiencing 3% rent growth at the low end of the scale, compared to rent growth ranging 5% to 8% and [Morguard’s] more stronger markets in Florida and Colorado.”<sup>121</sup>

<sup>118</sup> *Bridge Property Management Gains 9.4% Year-Over-Year Rental Growth with Yardi RENTmaximizer*, Business Wire (Sept. 29, 2015), <https://www.businesswire.com/news/home/20150929005288/en/Bridge-Property-Management-Gains-9.4-Year-Over-Year-Rental-Growth-with-Yardi-RENTmaximizer>.

<sup>119</sup> *Singh Management Gains Revenue and Occupancy Growth with Yardi RENTmaximizer*, *supra* note 93.

<sup>120</sup> Yardi, *Success Stories – Pillar Properties on Elevate*, <https://www.yardi.com/about-us/success-stories/pillar-properties-on-elevate/> (last visited Sept. 7, 2023).

<sup>121</sup> See Morguard North American Residential Real Estate Investment Trust, Q4 2015 Earnings Call (Feb. 18, 2016).



93. Confidential witness interviews provide further evidence that Landlord Defendants outsource their independent price decisions to RENTmaximizer and achieve supracompetitive returns as a result. For example:

- CW 1, who worked as a former leasing consultant for Bridge Property Management, stated that she regularly used Yardi to set prices for the apartments she managed. Specifically, she would input square footage of the apartment, the location, and Yardi's system would offer listing prices that she "just went for" without "question[ing]," explaining that she "[j]ust went with whatever it told me." She explained further that Yardi would show comparative pricing specific competitor apartment locations and that, in her opinion, this "was not fair for renters." She stated: "It was ridiculous. We were supposed to be helping these people who couldn't afford a home. Instead, we were raising rents."
- CW 2, another former employee at Bridge Property Management, recalled that he regularly received printouts from Yardi on apartment pricing, which he used in listings he created for the apartment complex he managed. CW 2 stated that the prices generated by Yardi were never questioned and could change daily. He also stated that this pricing practice gave "an unfair advantage" to lessors because they "all know what they should be renting for" by using the same pricing platform.
- Confidential Witness 3 ("CW 3")<sup>122</sup>, a former leasing agent at Bridge Property Management, explained that she frequently consulted Yardi's pricing recommendations to quote customers who applied for a rental. She stated that, in her time at Bridge, she never questioned the prices from Yardi—which came as daily printouts with prices that changed "daily"—and that "everybody was using it."
- Confidential Witness 8 ("CW 8"), who worked as a leasing specialist for Morguard, stated that Morguard utilized RENTmaximizer for apartment inventory and rent pricing. As a leasing specialist, CW 8 would run a daily printout from Yardi of available

<sup>122</sup> CW 3 worked for Bridge Property Management as a leasing agent in Marietta, Georgia, from 2018 until 2023.

1 apartment inventory and rent pricing. The pricing was automatically set by Yardi and  
2 fluctuated from day to day. Deviation from Yardi pricing required corporate override  
3 approval; CW 8 did not recall ever having to obtain approval for a rent price override  
4 during her tenure at Morguard.

5 94. Finally, on information and belief, RENTmaximizer users are aware that their  
6 competitors also use Yardi's price-setting software. CW 7, who worked at Yardi between 2019  
7 and 2021 as a senior account executive, explained that while Yardi's clients were "very  
8 concerned about sharing their rental rates more than anything," "[m]ost people appreciated the  
9 fact that if they shared data, they would get data from other clients using things like  
10 RENTMaximizer, so that everybody was benefitting from the data."

11 95. CW 5, who worked as an operations analyst at Yardi from 2013 to 2021, stated  
12 that she believed that many of Yardi's clients knew that their competitors or other companies  
13 were also using Yardi, and that some companies gave Yardi permission to disclose their  
14 relationship with it for marketing materials. (Consistent with this, as discussed throughout this  
15 Complaint, Yardi has issued a significant number of press releases touting lessors' use of  
16 RENTmaximizer, including their use of it to raise rents and eliminate concessions.) As  
17 discussed below, Landlord Defendants and Yardi also have numerous opportunities to collude  
18 at the Yardi Advanced Solutions Conferences (YASC) and social events. YASC is a large-scale,  
19 well-attended social event that is open to Yardi clients only.

20 96. Further, as detailed throughout this complaint, Yardi has long posted a continual  
21 stream of endorsements, press releases, and blog posts online touting RENTmaximizer's growth  
22 and numerous specific clients' success with it. Indeed, as discussed below (*see infra* Section D),  
23 Yardi employees (in a now deleted blog post from 2015) even wrote publicly about  
24 RENTmaximizer's unique success in raising rents in certain "*markets in which a significant*  
25 *number of properties use Yardi RENTmaximizer.*"

26 97. In summary, the widespread adoption of RENTmaximizer has distorted the  
27 multifamily rental market by artificially inflating prices and sharply lessening competition.  
28

C. **Yardi collects extensive data from landlords, including confidential pricing and occupancy data, that it inputs into its “Yardi Matrix Multifamily” product—which is then used to feed RENTmaximizer**

98. As noted above, Yardi advertises that it uses data from a separate product, “Yardi Matrix,” as an input to RENTmaximizer:

#### MARKET INTELLIGENCE

Yardi Matrix provides nationwide intelligence on markets, submarkets, competition, developments, rents, occupancy and more. This data delivers accurate indicators of economic trends and performance and helps you price apartments profitably. When this market-specific data is incorporated with your RENTmaximizer data, you can accurately benchmark performance and factor it into rent projections and calculations which enhances your revenue management strategy and helps boost the performance of individual assets.

99. In 2013, Yardi acquired the company Pierce-Eislen, which it described as “the industry’s most comprehensive apartment market intelligence analysis system,” and rebranded it “Yardi Matrix.”<sup>123</sup> Today, Yardi Matrix is a commercial real estate intelligence source that “offers the industry’s most comprehensive market intelligence” and provides users with various types of data about properties in certain markets, including rent and occupancy data.<sup>124</sup>

100. Among other things, Yardi offers versions of its “Matrix” product for various segments of the commercial real estate industry, including Yardi Matrix Multifamily (for multifamily rental properties), Yardi Matrix Student (student rental properties), and Yardi Matrix Office (office properties). Yardi explains that Matrix:

provides critical data to the professional property manager. Our comprehensive property-level data makes it easy to benchmark property performance, canvas competitors and neighborhoods and find new contracts. Gain a valuable understanding of the nature and performance of any portfolio of properties, using our powerful set of research and comparative market analysis tools.<sup>125</sup>

<sup>123</sup> Yardi, *Yardi Rentmaximizer Property Ratings: Improvement and Location Rating System*, The Balance Sheet: Yardi Corporate Blog (Mar. 1, 2015), available at <https://web.archive.org/web/20170801195125/https://www.yardi.com/blog/uncategorized/yardi-rentmaximizer-property-ratings/12650.html>.

<sup>124</sup> Yardi, *Yardi Matrix*, <https://www.yardimatrix.com/>.

<sup>125</sup> Yardi, *Yardi Matrix: Real Estate Data & Comparative Analysis Tools*, <https://www.yardimatrix.com/Property-Types/Solutions/Management-Portfolio-Health> (last visited Nov. 1, 2023).

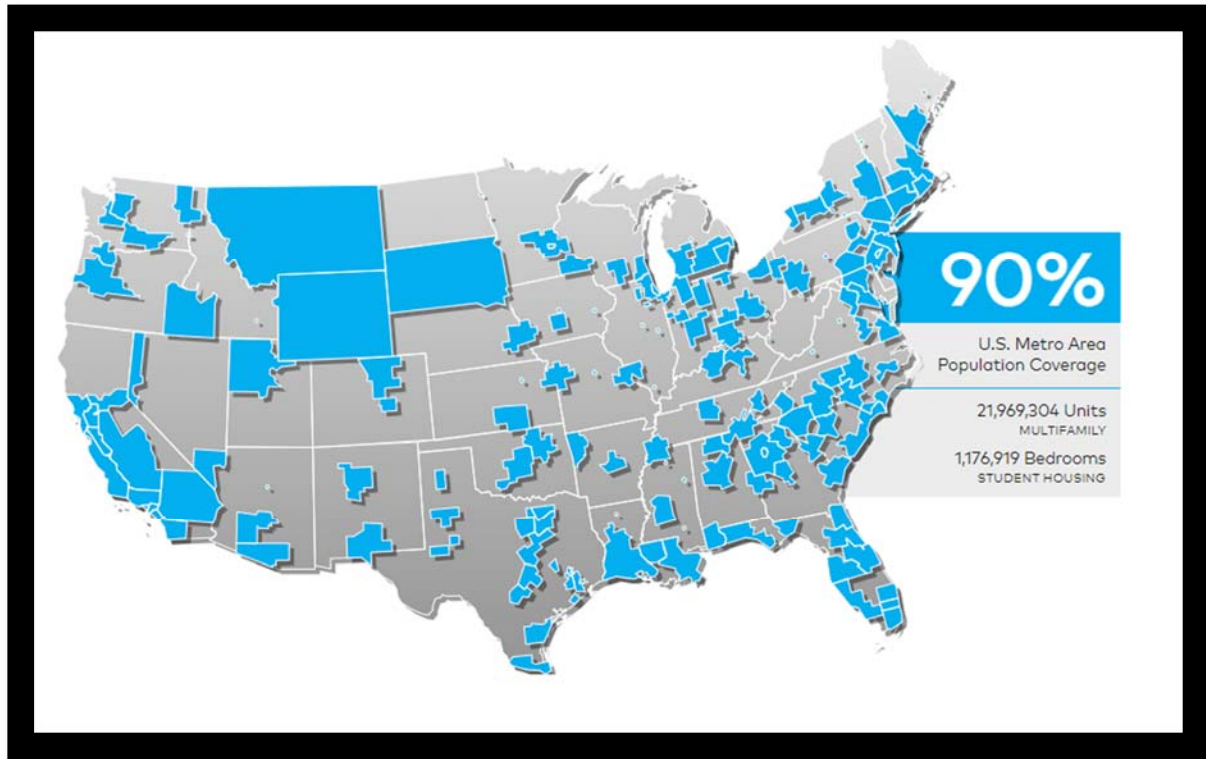
101. Yardi states that its property universe is the “largest and deepest refined database in the industry.”<sup>126</sup> According to a promotional video available on Yardi’s website, its “Matrix Multifamily” product “leverage[s] the most comprehensive apartment (>50 units) market data source covering 19+ million units, encompassing 90% of the U.S. Population”:



102. A map available on Yardi’s website underscores the extent of this nationwide coverage<sup>127</sup>:

<sup>126</sup> Yardi, *How We Compare*, <https://www.yardimatrix.com/About-Us/How-We-Compare> (last visited Nov. 1, 2023).

<sup>127</sup> Yardi, *Yardi Matrix: Markets*, <https://www.yardimatrix.com/Markets>.



103. Specifically, subscribers to Matrix Multifamily receive “real-time property data” on rental rates and occupancy history, as well as short and long-range forecasts of rent and occupancy at the market and sub-market levels. Elsewhere online, Yardi touts that Matrix subscribers “access *near up-to-the-minute market information at two levels*: the individual property or overview of market conditions critical to the assessment of current, and prospective, market status” and describes Yardi’s “apartment information service” as “a high-performance system with the *sole function of supporting the commercial apartment industry’s dominant participants*”<sup>128</sup>:

<sup>128</sup> Yardi, *Yardi Matrix Rent Survey*, <https://yardirentsurvey.wordpress.com/> (last visited Nov. 1, 2023) (emphasis added).



## YARDI MATRIX'S Fall 2023 Rent Survey begins Tuesday, September 5th!

### About YARDI MATRIX

Yardi Matrix, formerly known as Pierce-Eislen, Inc.®, was founded in March 2000 and acquired in July 2013 by Yardi Systems, Inc., a Santa Barbara, California software company focused on commercial real estate industry applications.

The Yardi Matrix apartment information service is a high-performance system with the sole function of supporting the commercial apartment industry's dominant participants. The company's services monitor the 50+ unit apartment universe from the property level to the submarket/market level in a form unique within the commercial apartment information industry.

Yardi Matrix subscribers' access near up-to-the-minute market information at two levels: the individual property or overview of market conditions critical to the assessment of current, and prospective, market status. A more complete description of the company is provided under "About Us" on our website at <https://www.yardimatrix.com>.

104. Other granular, unit specific data Yardi Matrix collects includes: (1) rental history by unit type; (2) property characteristics – unit mix, unit sizes, photographs, prior sales; (3) apartment properties currently under construction, or in the planning process; (4) property sale history.<sup>129</sup> A view of the Yardi Matrix interface can be see below for a sample property<sup>130</sup>:

<sup>129</sup> Yardi Matrix Overview, <https://www.yardimatrix.com/About-Us/Press-Kit/Yardi-Matrix-Overview>.

<sup>130</sup> *Yardi Elevate*, *supra* note 10.

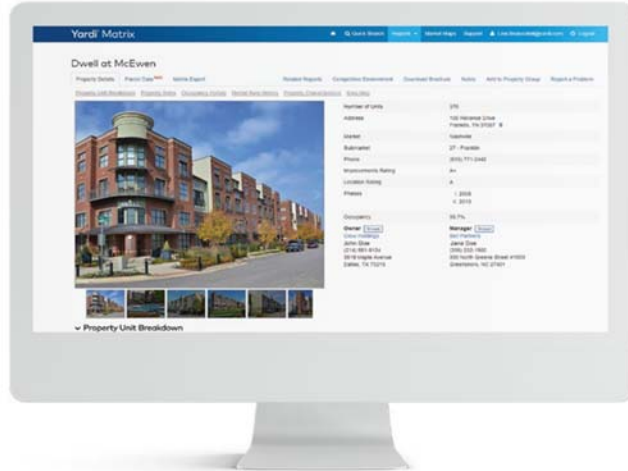


## ACCURATE TRACKING

Track asset performance and the valuation of your properties—along with those of your competitors or potential partners. Our proprietary improvement and location ratings systems allow you to compare apples to apples—giving you fair and balanced performance information to act upon.

## MARKET INSIGHTS

Whatever your role—asset management, acquisitions, refinance underwriting, valuations or sales—Matrix is your source for actionable information. Our renowned institutional research on markets, investment strategy and long-term trends is at your fingertips and included as a subscriber.

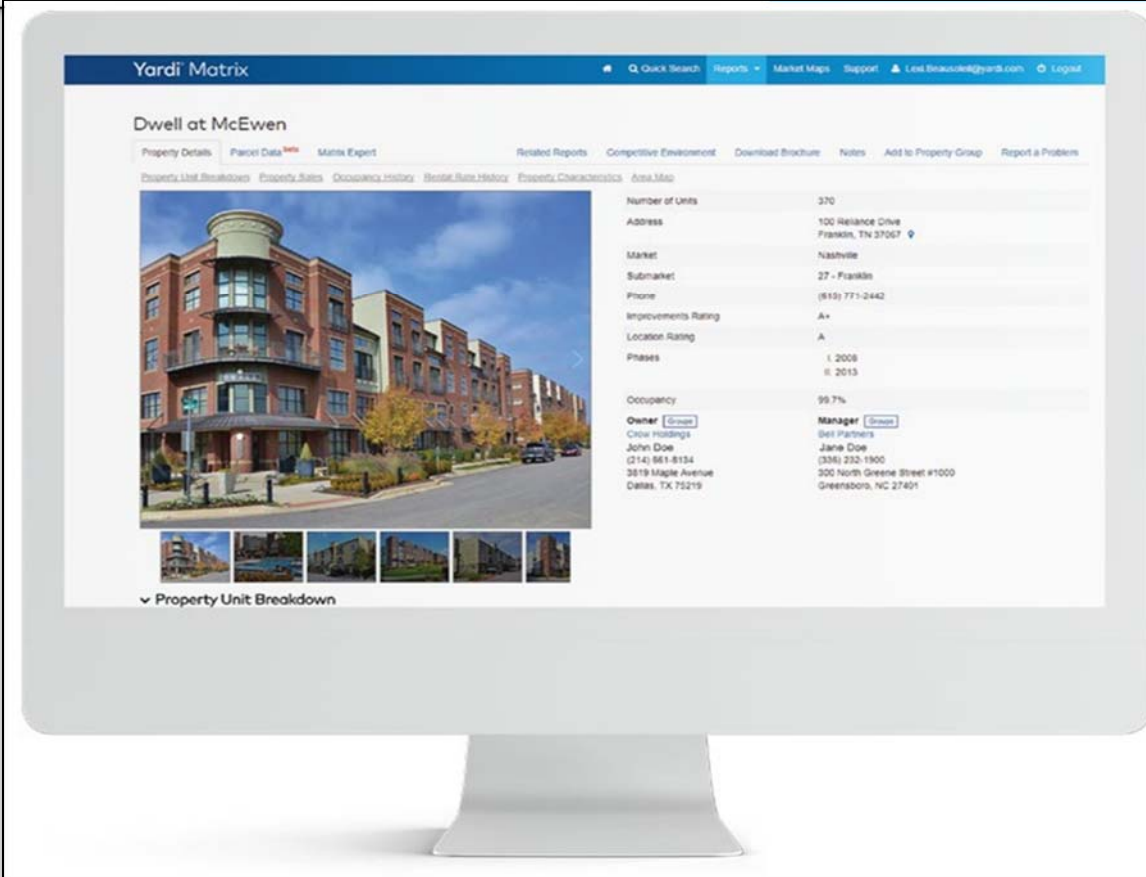


## KEY FEATURES

- Full ownership and management information
- In-place loans; construction, permanent, CMBS and their expirations
- Aggregated and anonymized revenue and expense comps—an industry exclusive
- Patented property improvement and location ratings systems
- Full competitive analysis to similar properties near your asset
- Comprehensive market economic data including demographics, labor statistics and the construction pipeline
- Data-driven occupancy and long-range forecasts
- Cloud-based services and mobile access



Yardi | 15



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105. Yardi prominently advertises the extensive amount of data available through Yardi Matrix<sup>131</sup>:

**Multifamily Market Data and Analysis**

Yardi® Matrix Multifamily is your source for originating, pre-underwriting and managing assets for profitable loans and investments. We are active in 178 Multifamily markets across the U.S., providing researched data on properties at least 50 units in size including exclusive data on single-family rentals in build-to-rent communities.

**Key Features**

- In place loans and expirations - construction, permanent and CMBS
- Full ownership and management information
- Complete property-level information, including detailed unit mix
- Rent, occupancy and sales history and comparables
- Patented improvements and location ratings systems
- Supply pipeline from end-to-end, planning to stabilization
- Short and long-range forecasts of rent and occupancy at the market and sub-market levels
- National coverage
- Competitive subscription pricing based on markets and users
- Exclusive data on single-family rentals in build-to-rent communities

**FEATURES**

**YARDI MATRIX MULTIFAMILY**

**REAL-TIME PROPERTY DATA**  
Gain access to patented improvement and location ratings, rental rate, occupancy history and current property manager information.

**LOAN DATA**  
Search for acquisition prospects by loan maturity schedules, lenders, borrowers, loan terms and estimated DSCR/LTV ratios.

**TRENDS & FORECASTS**  
Stay current with monthly national reports, metro reports and quarterly forecasts of rental rates, rent growth and occupancy across markets and submarkets.

**NEW SUPPLY PIPELINE**  
Get insight into new supply pipeline information at the asset, competitive set and market level.

**MATRIX EXPERT**  
Access exclusive aggregated and anonymized residential revenue and expense comps.

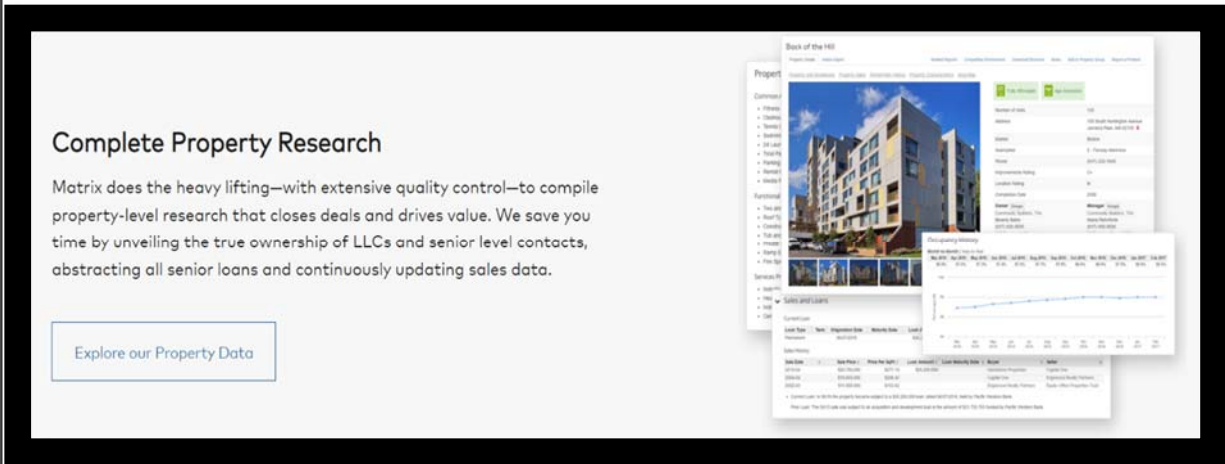
**yardimatrix.com/multifamily | matrix@yardi.com or (480) 663-1149**

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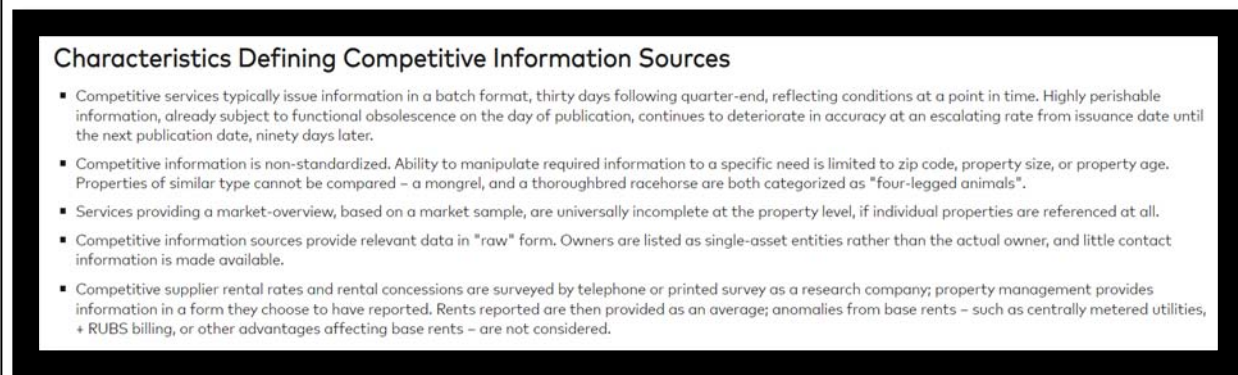
©2021 Yardi Systems, Inc. All Rights Reserved. Yardi, the Yardi logo, and all Yardi product names are trademarks of Yardi Systems, Inc. Yardi Matrix Multifamily 2020/21

<sup>131</sup> Yardi Matrix Multifamily Brochure, available at [https://www.yardimatrix.com/pdf/MultifamilyMarketCoverage/Matrix\\_Multifamily\\_brochure.pdf](https://www.yardimatrix.com/pdf/MultifamilyMarketCoverage/Matrix_Multifamily_brochure.pdf).

106. Yardi also emphasizes that it “does the heavy lifting—with extensive quality control—to compile property-level research that closes deals and drives value,” and advertises that users can get property unit breakdowns, sales and loan history, occupancy history, rental rate history for tens of thousands of properties<sup>132</sup>:



107. Yardi also takes pains to emphasize the granularity, standardization, accuracy, and “near real-time” quality of the data it makes available through Matrix is superior to that of “competitive services,” which it describes as generally providing stale, non-standardized, and incomplete information<sup>133</sup>:



108. Yardi obtains this extensive, granular data from at least two sources: (1) its clients, including users of its popular “Voyager” property management software; and (2) rent

<sup>132</sup> Yardi, *Multifamily Market Data and Analysis*, <https://www.yardimatrix.com/Property-Types/Multifamily> (last visited Nov. 1, 2023).

<sup>133</sup> Yardi, *How We Compare*, <https://www.yardimatrix.com/About-Us/How-We-Compare> (last visited Nov. 1, 2023).

1 surveys conducted multiple times a year, during which Yardi analysts call millions of properties  
2 “play[ing] the role of renter” to inquire about rental rates.

3 109. **Client data.** According to CW 6, a senior account executive at Yardi from 2015  
4 to 2019, all Yardi clients – or Voyager clients – contractually agree to share pricing and  
5 occupancy data with Yardi and to allow Yardi to use “aggregated data” as part of Matrix and  
6 RENTMaximizer. “When you sign your contract with [Yardi], you agree to give your data,  
7 aggregated,” CW 6 explained. According to CW 6, Yardi then presents it to clients as data  
8 “within three miles” or “five miles” or “this is the average rental.”

9 110. CW 6 explained that clients provide Yardi with “[e]verything about your pricing,  
10 your occupancy, all that good stuff.” This data then gets housed in Matrix. CW 6 explained that  
11 client data is sent to Yardi “nightly.”

12 111. CW 6 further explained that RENTmaximizer and Yardi Matrix were sold  
13 together, and that “you have to have Matrix” to get data that feeds into RENTmaximizer and  
14 generates pricing recommendations. CW 6 also stated that Yardi is “the largest multi-family  
15 player out there” and has “all the data from all of their properties inside Matrix. And then  
16 somebody buys that data in the form of RENTMaximizer.”

17 112. In other words, Defendants provide information to Yardi Matrix with the  
18 understanding that, in part, they will receive pricing recommendations from RENTmaximizer  
19 that are based on Yardi Matrix data; they contractually agree to share pricing and occupancy  
20 data with Yardi and understand that aggregated data from Yardi Matrix is used as part of  
21 RENTmaximizer.

22 113. **Telephone surveys.** Yardi Matrix also conducts regular “rent surveys”  
23 (approximately twice a year) to collect current pricing information about rental properties. As  
24 part of these rent survey, Yardi employees, masquerading as potential renters, call apartment  
25 community buildings to collect information about rents and current rent specials. Yardi itself  
26 has acknowledged that information it collects from rent surveys are used in RENTmaximizer,  
27 stating that asking rent adjustments in RENTmaximizer are based, in part, on “public  
28 information collected through surveys.”



1 According to Yardi, Yardi Matrix “researches and compiles static and dynamic apartment  
 2 market data specific to individual apartment properties, and to general apartment market  
 3 conditions.”<sup>134</sup> Specifically, multifamily rental market conditions are surveyed at two levels:  
 4 rental rates and concessions; and market occupancy.<sup>135</sup> Yardi explains that rental rates “are  
 5 gathered as a prospective renter by telephone survey, then reported in both Actual, and Market  
 6 Rate, formats.”<sup>136</sup> Yardi requires that all surveys be conducted as a potential renter to ensure the  
 7 accuracy of information collected<sup>137</sup>:

8  
 9 ***Surveys are Conducted as a Renter*** – Surveys must be conducted as a potential renter to  
 10 ensure accuracy of information. This requires that you be willing to play the role of a renter.

11 114. Yardi also conducts surveys on rental promotional activity in the form of  
 12 concessions annually, three times a year, by telephone survey among competitively rented  
 13 (market/rate) properties of 50 units and larger in size.<sup>138</sup>

14 115. Yardi has publicly stated in the past the data collected by its “analysts” is used in  
 15 RENTmaximizer. A 2015 post on Yardi’s corporate blog explains:

16 “Blind shopping” is one way Yardi Matrix collects data to  
 17 determine property values. Inquiring as prospects, analysts  
 18 currently call on 9.4+ million units in 77 markets three times per  
 19 year. This includes all properties over 50 units in specific markets,  
 20 and we are expanding this to include 100 markets, covering 97% of

21 <sup>134</sup> <https://www.yardimatrix.com/About-Us/Our-Methods>.

22 <sup>135</sup> [https://www.yardimatrix.com/About-Us/Our-Methods/How-We-Report-Rental-Market-  
 23 Conditions](https://www.yardimatrix.com/About-Us/Our-Methods/How-We-Report-Rental-Market-Conditions).

24 <sup>136</sup> “Actual rents” are the prices a property charges residents to occupy an apartment. Yardi  
 25 Matrix then adjusts “actual rents” to “market rents” for an apples-to-apples comparison in  
 26 reflecting the “the condition that apartment rental rates among floorplans of the same type.” *Id.*;  
 27 see also Yardi, *How We Compare*, <https://www.yardimatrix.com/About-Us/How-We-Compare>  
 28 (last visited Nov. 1, 2023) (“Rental rate information is surveyed by telephone, with surveyors  
 soliciting information as renters. Current ‘street’ rents are reported, then illustrated as both  
 ‘Actual’, and ‘Market’, rents. Market rents are converted – an apples-to-apples format,  
 accounting for anomalies influencing rent paid beyond a ‘base’ rental rate”).

<sup>137</sup> Yardi, *Yardi Matrix Rent Survey*, <https://yardirentsury.wordpress.com/> (last visited  
 Nov. 1, 2023).

<sup>138</sup> [https://www.yardimatrix.com/About-Us/Our-Methods/How-We-Report-Rental-Market-  
 Conditions/How-We-Survey-Rental-Concessions](https://www.yardimatrix.com/About-Us/Our-Methods/How-We-Report-Rental-Market-Conditions/How-We-Survey-Rental-Concessions).

the United States population. We include this collection of actual rent information at the unit-type level as part of the standard Yardi RENTmaximizer reporting system.<sup>139</sup>

116. A separate, now-deleted post from August 2014 on Yardi's blog likewise states:

Yardi RENTmaximizer™ users see an average 2 to 5 percent revenue lift over existing market rates. Recently, the ability to analyze portfolio or property performance comparative to the regional market performance has become even more powerful within the product platform.

*"We're now incorporating all the benchmark data from real estate intelligence provider Pierce-Eislen into the RENTmaximizer product," shares Dharmendra Sawh, industry principal for revenue management at Yardi. "This allows our customers to see exactly what revenue gains they are achieving, not only at their own property, but in comparison to their regional market."*

Acquired by Yardi in 2013, Pierce-Eislen provides nationwide intelligence on markets, submarkets, competition, developments, rents, and more.<sup>140</sup>

117. Landlord Defendants provide information to Yardi Matrix with the understanding that, in part, they will receive pricing recommendations from RENTmaximizer that are based on this extensive Yardi Matrix data.

**D. Economic analysis confirms that usage of Yardi produces anticompetitive effects in the form of higher prices for RENTmaximizer users.**

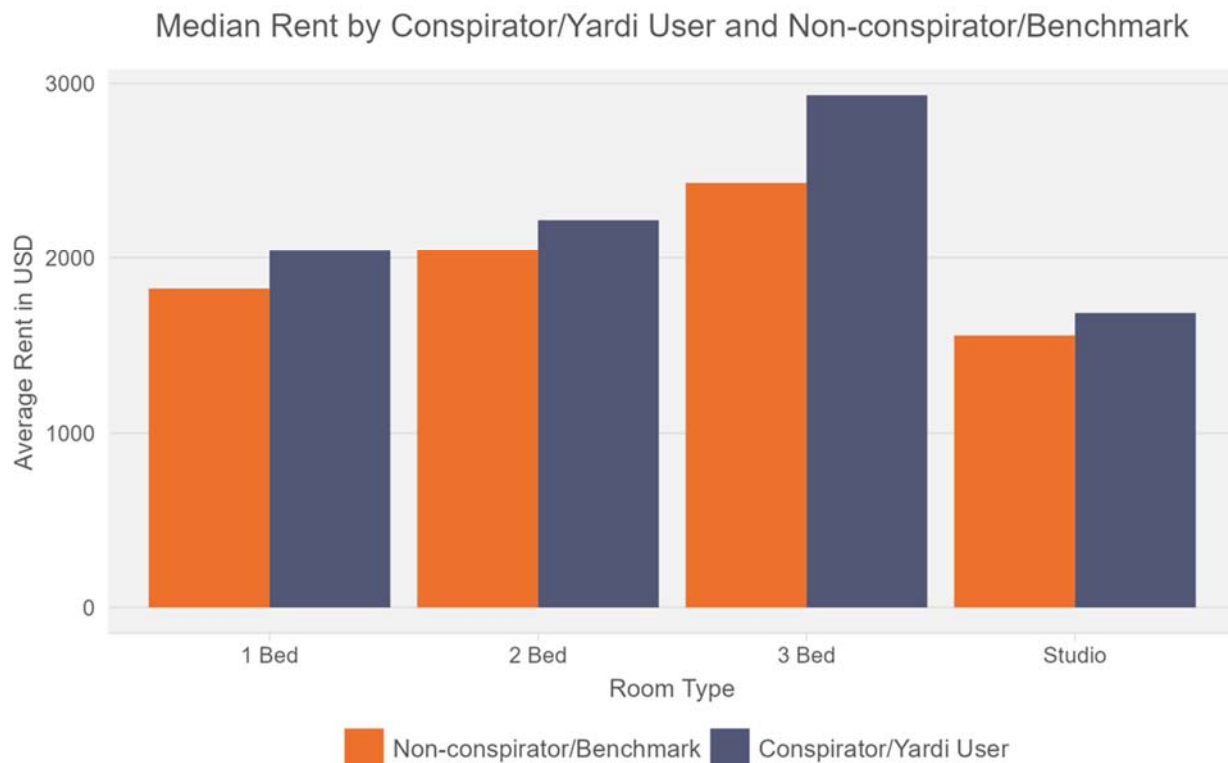
118. Economic analysis confirms that collective usage of Yardi RENTmaximizer leads to higher prices. Public rent data was collected over a period of several weeks in August 2023 from Seattle, Charlotte, and Phoenix. A regression analysis was then performed in zip codes where usage of Yardi RENTmaximizer was higher than 15% of available units. The regression analysis controlled for various property and geographic features, such as (1) size of

<sup>139</sup> Yardi, *Yardi Rentmaximizer Property Ratings: Improvement and Location Rating System*, The Balance Sheet: Yardi Corporate Blog (Mar. 1, 2015), available at <https://web.archive.org/web/20170801195125/https://www.yardi.com/blog/uncategorized/yardi-rentmaximizer-property-ratings/12650.html>.

<sup>140</sup> Leah Etling, *Revolutionary Revenue: Market Data Insight* (Aug. 27, 2014), The Balance Sheet: Yardi Corporate Blog, available at <https://web.archive.org/web/20140908043659/https://www.yardi.com/blog/news/revolutionary-revenue/11339.html> (emphasis added).



the unit, (2) number of bathrooms, (3) census average rent in the zip code, and (4) median income in the zip code. Across over 23,000 units, the regression found an average overcharge of 6% on units priced using RENTmaximizer (blue) as compared to units not priced using RENTmaximizer (orange), including for studio, 1-bedroom, 2-bedroom, and 3-bedroom apartments. This is closely consistent with Yardi's repeated public statements that usage of RENTmaximizer led to a 6% average increase in net rental income:



119. These findings are further corroborated by additional, detailed *analyses that Yardi itself performed*. In a now-deleted March 1, 2015 post on Yardi's corporate blog, Yardi staff used rent data shopped from "more than 9.2 million units"—obtained through phone surveys performed by the then-recently acquired Pierce-Eislen (rebranded "Matrix")—"to compare RENTmaximizer properties' performance against their market, the submarket, and submarket-equivalent properties," and "analyzed properties on RENTmaximizer from the end of 2012 through April 2014 and compared the aggregate performance of this 'same store sales' population against the market." Yardi's analysis found that "[a]t the end of April 2014, RENTmaximizer properties saw rental rates over 2% above the market" *even including*

“properties using other revenue management software,” with “[t]he markets [growing] at a combined rate of 3.9%, while RENTmaximizer properties outperformed the market and grew at nearly 6%”:

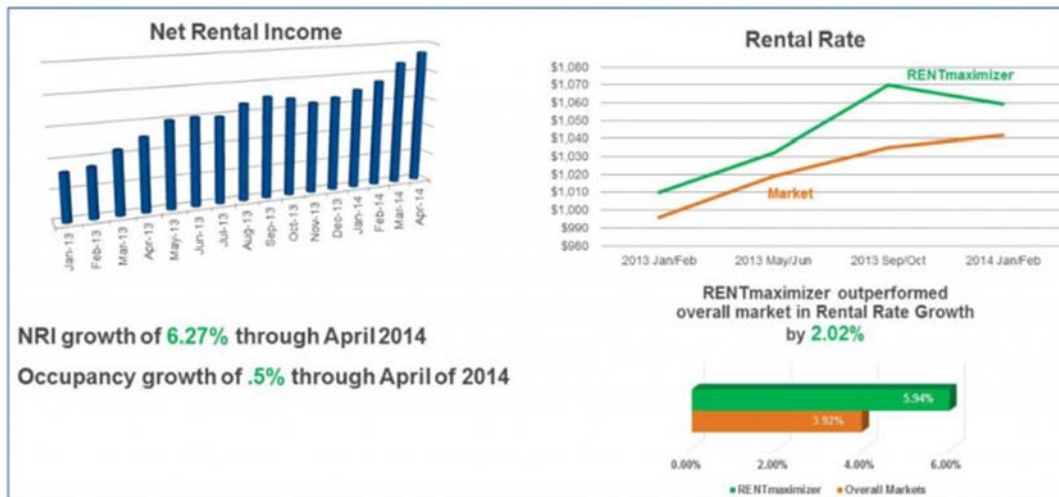


Figure 1: RENTmaximizer Results vs Market

120. Yardi also performed a separate analysis “for some markets in which a significant number of properties use Yardi RENTmaximizer” and found substantial above-market gains in many of these:

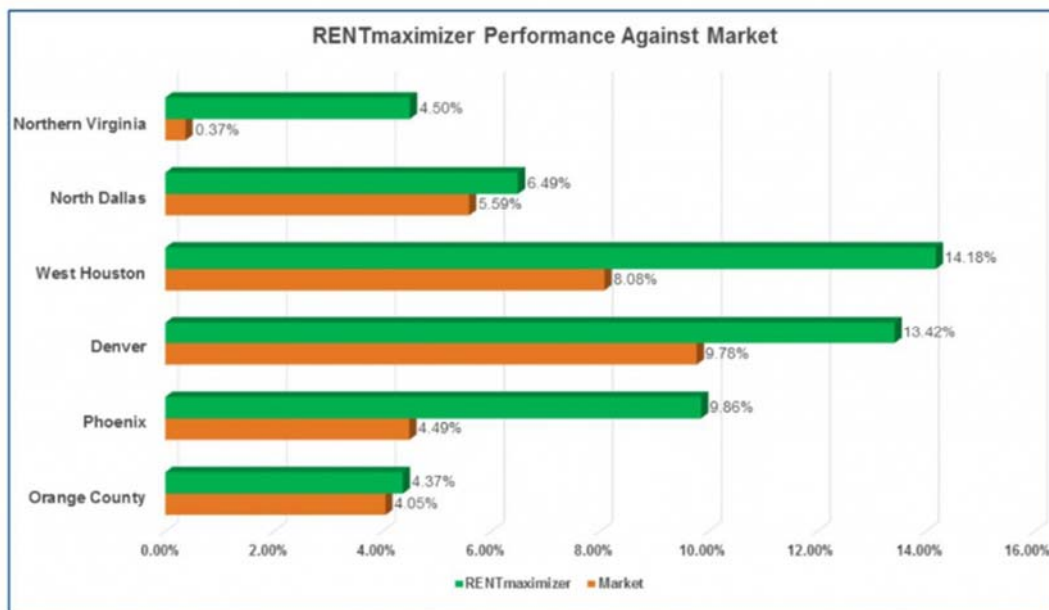


Figure 2: Selected Market Performance

121. Reflecting on these results, Yardi's staff remarked on the substantial above market gains in many of the markets above, and explicitly noted that in Orange County, where Yardi exceeded the competition only slightly, this was likely because "many more properties in this market use other revenue management systems":

Figure 2 above shows results for some markets in which a significant number of properties use Yardi RENTmaximizer. Denver, one of the top five "hottest" markets in 2013, saw a market rental growth of 9.8%, while the RENTmaximizer properties grew by almost 13.5%. RENTmaximizer customers exceeded the market by almost 3.7%. Similarly, the Houston market grew by 8% overall, while RENTmaximizer properties produced 14%—a 6% advantage for RENTmaximizer customers.

Another extreme example, the market in Orange County, California saw 4.05% growth while RENTmaximizer properties grew by 4.37%. Orange County rental rates are very high compared to other markets, and many more properties in this market use other revenue management systems. Even this small increase above market using RENTmaximizer creates a significant income difference.<sup>141</sup>

122. In a conclusion to the post, Yardi staff wrote that "we now have *significant statistical proof that RENTmaximizer produces consistently better results than the market, and our customers tell us that we provide the best support in the industry . . .* Yardi RENTmaximizer delivers better results, better service, and complete visibility into the 'health' of your property performance and how it drives your pricing results":

### **Conclusion**

Yardi RENTmaximizer has seen exponential adoption growth since it was introduced in 2011 and continues to prove itself in the market. The system's intuitive approach and transparent reporting make it easy for property teams to understand and accept its daily pricing methodology.

The August 2014 release of RENTmaximizer enables customers to compare the performance of each of their properties to its market, submarket, and submarket-equivalent properties. This reporting feature has become very popular with our customers, and we plan

<sup>141</sup> Yardi, *Yardi RENTmaximizer Market Analysis: 2013 Performance Results*, The Balance Sheet: Yardi Corporate Blog (Mar. 1, 2015), available at <https://web.archive.org/web/20210302115856/https://www.yardi.com/blog/uncategorized/yardi-rentmaximizer-market-analysis/12670.html>.

1 to expand capabilities in this area in future releases of  
2 RENTmaximizer.

3 We now have significant statistical proof that RENTmaximizer  
4 produces consistently better results than the market, and our  
5 customers tell us that we provide the best support in the industry.  
6 Our service team of experienced revenue managers is included with  
7 the RENTmaximizer product. Yardi RENTmaximizer delivers  
better results, better service, and complete visibility into the  
“health” of your property performance and how it drives your  
pricing results.

8 **E. Defendants’ conduct has no pro-competitive benefits**

9 123. Defendants rent pricing scheme has not benefited competition. It has also not had  
10 pro-competitive effects in the multifamily housing rental market.

11 124. Instead, Defendants conduct has had the effect of benefitting them by increasing  
12 revenues and profits; meanwhile, consumers have subsidized this misconduct by paying  
13 artificially inflated prices for their rent.

14 125. While Defendants’ misconduct may have increased their operational efficiencies  
15 (e.g., by saving costs, time, or other resources associated with traditional methods of fair rent  
16 pricing), it has meanwhile made it more time-consuming and difficult for consumers to identify  
17 and secure meaningfully less expensive rental rates for comparable properties offered by  
18 Defendants’ co-conspirators.

19 126. Assuming any procompetitive benefits from Defendants’ misconduct exist, they  
20 would be minimal in nature and could not outweigh the substantial and anticompetitive effects  
21 of this misconduct.

22 **F. Studies show that industry-wide usage of a shared pricing algorithm leads to  
23 anticompetitive effects.**

24 127. Extensive economic research documents that the use of pricing algorithms leads  
25 to anticompetitive effects, including elevated prices. Modern algorithms can use artificial  
26 intelligence to reach the objective of maximizing profits without the need for human  
27 intervention. Indeed, legal scholars, economists, and antitrust regulators studying this issue have  
28

all concluded that competitors' use of a shared pricing algorithm to set prices produces the same types of anticompetitive effects alleged here.

128. In a May 2017 paper, "Algorithmic Collusion: Problems and Counter-Measures," competition law professors Ariel Ezrachi and Maurice Stucke discuss "how in an online environment a hub-and-spoke [price-fixing conspiracy] framework may emerge when sellers use the same algorithm or the same data pool to determine price." In particular they state that:

An industry-wide use of a single algorithm, which competitors use to determine the market price or react to market changes, would result in de-facto hub-and-spoke structure, as the market behavior of the competitors aligns due to the use of a similar "brain" to determine their price strategy. These effects intensify when sellers use the same data pool and are privy to vast volumes of data. Hub-and spoke structures may therefore be observed at the input level (data) and the output level (algorithm).<sup>142</sup>

129. Ezrachi and Stucke note this situation playing out in connection with gas stations using the same third-party analytics provider to determine fuel prices. The professors conclude that "[t]his anecdotal example supports the assertion that as competitors use a single hub – a single provider for algorithmic pricing – one may expect, in markets susceptible to tacit collusion, greater alignment of pricing decisions and higher prices overall."

130. Consistent with this, a growing body of academic research documents that algorithms make it easier for competitors to coordinate on pricing and charge supracompetitive prices. For example, an experimental study published in the American Economic Review found that competing firms, using AI powered algorithmic pricing, would settle, over time, into an equilibrium model where each firm charged supracompetitive prices.<sup>143</sup> The result was robust to asymmetries in cost or demand, or changes in the numbers of players.

<sup>142</sup> Ariel Ezrachi and Maurice Stucke, *Algorithmic Collusion: Problems and Counter-Measures*, at 10, Roundtable on Algorithms and Collusion (June 2017), available at <https://one.oecd.org/document/DAF/COMP/WD%282017%2925/en/pdf>.

<sup>143</sup> Emilio Calvano et al., *Artificial Intelligence, Algorithmic Pricing and Collusion*, 110 AM. ECON. REV. 3267-97 (Oct. 2020), <https://www.aeaweb.org/articles?id=10.1257/aer.20190623>.

131. Similarly, a 2021 empirical study found (in line with the predictions of theoretical models, and with Ezrachi and Stucke’s predictions) that when gas stations in Germany used algorithms to set prices, their margins increased by approximately 9%. Critically, the authors found that algorithm use only raised prices above competitive levels in places where competitors adopted algorithms jointly, and thus that “algorithmic pricing software adoption raises margins *only through its effects on competition*”; by contrast, in areas where (1) a station had no competitors or (2) there were two stations but only one adopted algorithmic pricing, the authors found “no change in mean margins or pricing.”<sup>144</sup> In other words, algorithm use among these stations raised prices not by driving efficiency or achieving some procompetitive result, but instead by undermining normal market competition. The authors also note:

Algorithmic pricing can also affect competition if a single intermediary software provider sells their product to multiple competitors. Such adoption could lead to hub-and-spoke (where the provider acts as the hub of the sellers, Ezrachi and Stucke 2015) or parallel-use scenarios, with competitors coordinating to higher prices by delegating choices or relaying information to the same third party. These concerns are warranted by the statements and observed behaviour of software providers. Some providers promote their products by suggesting that they optimize for long-term revenues and avoid price wars.<sup>145</sup>

132. Uber also sets prices algorithmically, which users recognize in now-regular occurrences of “surge pricing” where prices spike (often to eyewatering levels) at times of high demand. This algorithmic pricing leads to higher prices for customers and higher revenue for Uber, even though Uber’s costs do not change significantly during the surge pricing periods. As one academic has noted, even though drivers are theoretically independent contractors who could compete against each other, each driver has “agreed to have their prices coordinated and set by the algorithm.” This could constitute, as the author puts it, a “twenty-first-century[]

<sup>144</sup> See Stephanie Assad et al., *Autonomous algorithmic collusion: Economic research and policy implications* at 15, Toulouse School of Economics Working Paper (Mar. 2021), available at [https://www.tse-fr.eu/sites/default/files/TSE/documents/doc/wp/2021/wp\\_tse\\_1210.pdf](https://www.tse-fr.eu/sites/default/files/TSE/documents/doc/wp/2021/wp_tse_1210.pdf) (emphasis added).

<sup>145</sup> *Id.* at 4.



1 techno-cartel.”<sup>146</sup> Areeda and Hovenkamp also state that a “practice of interseller price  
 2 verification . . . would appear to be a naked or at least a nearly naked restraint” in violation of  
 3 antitrust law.<sup>147</sup>

4 133. Government regulators around the world have also expressed concerns about  
 5 algorithmic pricing’s effect on competition.

6 134. Earlier this year, for example, the Principal Deputy Assistant Attorney General  
 7 of the Antitrust Division for the Department of Justice stated: “Where competitors adopt the  
 8 same pricing algorithms, our concern is only heightened. Several studies have shown that these  
 9 algorithms can lead to tacit or express collusion in the marketplace, potentially resulting in  
 10 higher prices, or at a minimum, a softening of competition.”<sup>148</sup>

11 135. Similarly, as noted above, while serving as acting chairman of the Federal Trade  
 12 Commission, Maureen Ohlhausen explained in 2017 how multiple firms outsourcing pricing  
 13 decisions to a single third-party actor—just as lessors have done with Yardi—raises significant  
 14 antitrust concerns, and asked rhetorically: “Is it ok for a guy named Bob to collect confidential  
 15 price strategy information from all the participants in a market, and then tell everybody how  
 16 they should price? If it isn’t ok for a guy named Bob to do it, then it probably isn’t ok for an  
 17 algorithm to do it either.” Ohlhausen emphasized: “this is fairly familiar territory for antitrust  
 18 lawyers, and we even have an old fashioned term for it, the hub-and-spoke conspiracy. Just as  
 19 the antitrust laws do not allow competitors to exchange competitively sensitive information  
 20 directly in an effort to stabilize or control industry pricing, they also prohibit using an  
 21 intermediary to facilitate the exchange of confidential business information.”<sup>149</sup>

22  
 23  
 24  
 25 <sup>146</sup> Salil K. Mehra, *Antitrust and the Robo-Seller: Competition in the Time of Algorithms*,  
 100 MINN. L. REV. 1323-75 (2015).

26 <sup>147</sup> Herbert Hovenkamp & Phillip E. Areeda, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST*  
 27 *PRINCIPLES AND THEIR APPLICATION* ¶ 2113 (4th and 5th Ed. 2018-2022).

28 <sup>148</sup> U.S. Dep’t of Justice, *supra* note 31.

<sup>149</sup> Ohlhausen, *supra* note 32.

136. Yardi here plays exactly the role of a guy named Bob. It collects price information from each of the Landlord Defendants, and then tells them, through use of its algorithm, how to price multifamily housing.

**G. Parallel conduct and “plus factors” indicate an existence of a price-fixing conspiracy.**

137. As set forth in detail above, Defendants engaged in multiple forms of parallel conduct including (1) entering into agreements to use RENTmaximizer and using RENTmaximizer during the same periods of time; (2) each using pricing adjustments provided by RENTmaximizer with the understanding that usage would produce artificially inflated prices; and (3) each implementing significant rental prices increases after beginning their usage of RENTmaximizer, as shown in the numerous press releases issued by Yardi trumpeting Defendants’ higher rental prices after implementation of RENTmaximizer.

138. In addition, the multifamily market has numerous “plus factors” that render the industry susceptible to collusion and tend to exclude the possibility of independent action. These “plus factors” include (1) exchanges of competitively sensitive information, (2) actions against economic self-interest, (3) high barriers to entry, (4) fungible products subject to inelastic consumer demand; (5) high switching costs; (6) ample opportunities to collude; and (7) a related government investigation into similar conduct by RealPage, which makes competing software (“YieldStar”).

**1. Exchanges of competitively sensitive information**

139. Landlord Defendants all agreed to submit their confidential business information to Yardi RENTmaximizer with the knowledge that the system would use that data to calculate rents for their competitors. Such an agreement of mutual sharing and receiving competitors’ information makes sense for Landlord Defendants only if they are assured that their competitors will not use the information provided to gain competitive advantage, i.e., lure renters away through reduced rents. As CW 7, who worked at Yardi between 2019 and 2021 as a senior account executive, explained: while Yardi’s clients were “very concerned about sharing their

rental rates more than anything,” “[m]ost people appreciated the fact that if they shared data, they would get data from other clients using things like RENTMaximizer, so that everybody was benefitting from the data.”

140. Moreover, confidential witness interviews revealed that Landlord Defendants regularly engaged in “market surveys” to exchange each other’s competitively sensitive pricing information. For example, CW 1, a former leasing consultant for Bridge Property Management, stated that she regularly conducted market surveys by “shopping” other apartment complexes, where she would gather information on pricing. Similarly, CW 2, another former employee at Bridge Property Management, recalled that he would call competitors complexes and asked their leasing agents for rent prices.

141. Confidential Witness 9 (“CW 9”), a former employee at HNN Communities in Seattle, stated that she regularly did market surveys of pricing of competitors’ buildings. CW stated that she would call competitors and ask them for pricing information, stating “it was common for neighboring properties to share information.”

142. Yardi itself understands that its clients engage in this kind of market research through direct communications with competitors that is then incorporated into the rent adjustments that RENTmaximizer provides. Yardi itself states that RENTmaximizer may incorporate into its rent adjustments “asking rents for comparable properties that the client selects,” which may include data that “come[s] from the client’s own research.”

## **2. Actions against economic self-interest.**

143. Defendants’ pricing strategy—dramatically increasing rents notwithstanding market conditions—is irrational and against self-interest in a competitive market. In the absence of changes in demand, no rational property managers would act alone to raise rents as they did here during the class period, because any empty units priced exceeding the competitive market price would soon be filled by competitors who offer renters at lower prices.

## **3. High barriers to entry**

144. Where there are significant barriers to entry, new entrants are less likely to enter the market. Thus, barriers to entry help to facilitate the formation and maintenance of a

1 collusion. This holds true here. Property owners and operators face significant entry barriers due  
 2 to the substantial upfront costs they need to invest in procuring properties, setting up property  
 3 management systems, complying with regulations and incurring continued outlays for property  
 4 upkeep. Even relatively modest rental properties require substantial investments. As a result, the  
 5 multifamily leasing market is less attractive to new entrants, and businesses who just entered the  
 6 market are less likely to be able to discipline cartel pricing.

7 145. In addition to building and acquisition costs, developing and maintaining a  
 8 multifamily rental housing property takes years. Thus, entrants into the market are unlikely to  
 9 discipline cartel pricing in the short or medium term.

10 **4. Fungible products subject to inelastic consumer demand.**

11 146. With an accounting of a few key overarching property characteristics, such as  
 12 bedroom and bathroom count, amenities, location, and building age, residential properties in the  
 13 multifamily housing market are generally interchangeable. This is especially true because the  
 14 information exchanged by Landlord Defendants through RENTmaximizer is unit-type specific  
 15 and relates to properties with comparable configurations; thus, the fact that multifamily  
 16 properties in general have various characteristics does not bear on the ability of Landlord  
 17 Defendants to coordinate rents through RENTmaximizer. Through the RENTmaximizer pricing  
 18 algorithm and “dedicated revenue managers” who regularly meet and communicate with  
 19 property managers, RENTmaximizer lets competitors know and respond in real time to one  
 20 another’s price.

21 147. Additionally, renters’ demand for renting multifamily homes is inherently  
 22 inelastic. In most instances, despite price increases, renters still choose to live within certain  
 23 geographic locations, such as somewhere close to their offices, schools, communities, and the  
 24 only practicable alternative – purchasing a home – is neither financially nor logistically possible  
 25 for many renters. Thus, because Landlord Defendants dominated the relevant market during the  
 26 Class Period, renters generally have limited realistic alternatives to discipline Defendants’  
 27 pricing.

1           **5. High switching costs**

2           148. The market for multifamily rental housing also has high switching costs. Faced  
3 with a rent increase, many tenants are forced to remain in their current property due to the  
4 prohibitively high costs in time and money associated with moving, even if a better-priced  
5 alternative is available (e.g., locating an alternative place to live, costs associated with moving,  
6 disruptions to personal and work life). Further, many renters are subject to penalties for early  
7 termination of a lease (e.g., forfeit of a security deposit or the requirement that the tenant pay  
8 rent until the property is re-rented) that make switching even more difficult and/or cost-  
9 prohibitive.

10          149. As a result, it is difficult for renters to switch from one rental unit to another  
11 even if their current unit is priced at a supracompetitive level. This enhances landlords' power,  
12 and makes collusion more effective, because customers will not typically break their leases to  
13 enter a lease for a lower cost property given the substantial cost of doing so. Further, where  
14 price increases occur throughout geographic areas (as they do when landlords enter a cartel)  
15 renters often do not have any lower-priced options available in reasonable proximity to their  
16 work, school, or home. Renters thus cannot simply turn to alternative lessors in their region to  
17 discipline cartel pricing.

18           **6. Ample opportunities to collude**

19          150. Landlord Defendants and Yardi have numerous opportunities to collude at the  
20 Yardi Advanced Solutions Conferences (YASC) and social events. YASC is a large-scale, well-  
21 attended social event that is open to Yardi clients only.<sup>150</sup> Confidential Witness 4 (CW 4),<sup>151</sup> a  
22 former senior event specialist at Yardi, stated that YASC "is attended by about 2,000 people  
23  
24  
25  
26

27          <sup>150</sup> <https://www.yardi.com/yasc/north-america/> (last visited Sept. 7, 2023).

28          <sup>151</sup> From 2018 to 2022, CW 4 held various positions at Yardi, including as an account manager and event specialist in marketing.

each time, who pay to participate.”<sup>152</sup> Consistent with this, a post on Yardi’s LinkedIn page boasts that the 2022 YASC, held in San Diego, “welcome[d] 3,000 Yardi clients.”<sup>153</sup>

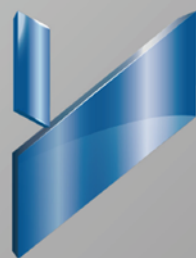
151. According to CW 4, the convention includes training sessions and panel discussions, but is mostly a “networking event.” YASC provides a designated “networking lounge” for attendees to meet with others who work in the same specialized areas in real estate. Consistent with this, the conference agenda for the 2015 YASC conference prominently advertises that it presents “networking opportunities” as well as a “personalized expert advice” in a “networking lounge” where attendees can have “one-on-one discussions with Yardi’s product experts”:

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<sup>152</sup> The ticket price for attending YASC North America is \$1,195 USD. <https://www.yardi.com/yasc/north-america/> (last visited Sept. 7, 2023).

<sup>153</sup> See [https://www.linkedin.com/posts/yardi\\_welcome-to-yasc-2022-activity-6970800896951676928-sqog/?trk=public\\_profile\\_like\\_view#](https://www.linkedin.com/posts/yardi_welcome-to-yasc-2022-activity-6970800896951676928-sqog/?trk=public_profile_like_view#).





# YASC '15

## Yardi Advanced Solutions Conference

### TUESDAY, OCTOBER 6

Golf Outing	12:30 p.m. (shotgun start)		
Registration	2	-	6 p.m.

### WEDNESDAY, OCTOBER 7

Registration Desk	7	-	10 a.m.
Continental Breakfast	7:30	-	8:30 a.m.
General Session	8:30	-	9:30 a.m.
Spotlight Sessions	9:45	-	10:45 a.m.
Hospitality Desk	10 a.m.	-	6 p.m.
Computer Lab	9:30 a.m.	-	6 p.m.
Internet Café	9:30 a.m.	-	6 p.m.
Morning Sessions	11 a.m.	-	noon
Lunch	noon	-	1:15 p.m.
Afternoon Sessions	1:15	-	5 p.m.
Networking Reception	5:30 p.m.	-	9 p.m.

### THURSDAY, OCTOBER 8

Hospitality Desk	7 a.m.	-	5 p.m.
Computer Lab	7:30 a.m.	-	5:30 p.m.
Internet Café	7:30 a.m.	-	5:30 p.m.
Breakfast	7:30	-	8:30 a.m.
Morning Sessions	8:30 a.m.	-	noon
Lunch	noon	-	1:15 p.m.
Afternoon Sessions	1:15	-	5 p.m.
Cocktail Reception	6	-	7 p.m.
Gala Dinner and Entertainment	7	-	11 p.m.

### FRIDAY, OCTOBER 9

Hospitality Desk	7:30 a.m.	-	noon
Computer Lab	7:30 a.m.	-	noon
Internet Café	7:30 a.m.	-	noon
Breakfast	7:30	-	8:30 a.m.
Morning Sessions	8:30 a.m.	-	noon

### COURSE FORMAT

With 60 minute-long sessions, you can register for up to 14 sessions throughout the conference to get the most value for your time and money. We have classroom sessions, roundtables, and panel discussions to give you the information you need to keep your business social, mobile, and smart.

### INTRODUCING THE YASC APP!

We've created a new app designed just for YASC. Use it to download course materials, complete your session evaluations, and view or change your class selections—you can even monitor YASC social feeds during the conference! Once course materials are available, registered attendees will receive a unique login to manage conference resources on the go from any Apple or Android mobile device.

### NETWORKING OPPORTUNITIES

Make valuable connections with your industry peers from around the world — as well as with Yardi staff and consultants — during the kick-off cocktail reception, dinner gala, or one of the full breakfasts, gourmet lunches, and snack breaks.

### HANDS-ON EXPERIENCE

Reinforce newly acquired skills with hands-on experience in our on-site lab, which offers assistance with all products. SQL scripting and reporting, and the opportunity to engage in one-on-one discussions with Yardi's expert account managers and technical staff. For lab hours, refer to the conference schedule.

### PERSONALIZED EXPERT ADVICE



The Networking Lounge is your opportunity for one-on-one discussions with Yardi's product experts.

Considering making the switch to Voyager 7S? Let your sales rep walk you through the steps you'll take to move to our most advanced property management platform. Already have Voyager 7S? You'll probably be interested in the various add-on modules that expand the Voyager feature set to cover your business from the back office to the field.

### SOCIAL MEDIA SOLUTIONS

The Social Media Lounge is the go-to place for help analyzing your company's social media strategy. Talk to one of our social media gurus about optimizing your online presence, reputation management, and so much more. The Lounge is available throughout most of the conference, so drop by and say hi!

1           152. Previous YASC conference agendas indicate that Yardi provides  
 2 RENTmaximizer trainings at these yearly conferences. For example, the 2015 YASC  
 3 conference agenda included two separate RENTmaximizer-specific trainings:

- 4
- 5           **RM020**   Yardi RENTmaximizer  
 6            Learn about Yardi's approach to rental pricing, enabling you to  
 7 realize the full benefits of revenue management systems. We will  
 8 cover pricing methodology and term-based pricing, which allow  
 9 freedom of choice while optimizing lease terms to smooth out  
 10 expirations. This trends-based approach to pricing also allows  
 11 you to recover costs and increase revenue using rules you define.
- 12           **RM210\***   Getting the Most out of RENTmaximizer  
 13            This session will cover best-practice settings for a wide range  
 14 of areas including lease renewal pricing and the various  
 15 options you have available to you. In addition we will cover  
 16 demand indicators to give you an understanding of what  
 17 may work best for your organization. Lastly, you will learn  
 18 about new and little-known RENTmaximizer features.

19

20           153. Similarly, the 2019 YASC conference agenda includes a training on “getting the  
 21 most out of RENTmaximizer” as well as a “RENTmaximizer overview” session:  
 22  
 23  
 24  
 25  
 26  
 27  
 28

**Wednesday, May 22**

<b>CM075</b>	Yardi Elevate Retail Manager: Introduction	8:30 – 8:55 a.m.
<b>CM090</b>	Yardi Elevate Forecast Manager for Commercial: Introduction	9 – 9:25 a.m.
<b>TE060</b>	Document Management for SharePoint	9 – 9:25 a.m.
<b>JC020</b>	Yardi Elevate Construction Manager for Commercial: Introduction	9:45 – 10:10 a.m.
<b>CH020</b>	Corporate Housing: Overview	9:45 – 10:10 a.m.
<b>eL040</b>	eLearning: Introduction	10:15 – 10:40 a.m.
<b>RM030</b>	Yardi Elevate for Multifamily: Introduction	10:15 – 10:40 a.m.
<b>CM063</b>	Yardi Elevate Deal Manager for Commercial: Introduction	11 – 11:25 a.m.
<b>RM070</b>	Yardi Matrix for Residential	11 – 11:25 a.m.
<b>CM020</b>	Yardi Elevate for Commercial: Introduction	11:30 – 11:55 a.m.
<b>P2P050</b>	Procure to Pay Demo	1:20 – 1:45 p.m.
<b>EU060</b>	IoT & Smart Homes	1:20 – 1:45 p.m.
<b>P2P040</b>	Bill Pay Overview	1:50 – 2:15 p.m.
<b>EU062</b>	Success Stories: Utility Invoice Processing & Benchmarking	1:50 – 2:15 p.m.
<b>IM010</b>	Why Use Investment Management?	2:30 – 2:55 p.m.
<b>KT020</b>	RENTCafé Connect & Call Automation	2:30 – 2:55 p.m.
<b>IM020</b>	Investment Management New Features: Performance Analysis & Debt Management	3 – 3:25 p.m.
<b>RM040</b>	ScreeningWorks Pro: Introduction	3 – 3:25 p.m.
<b>CM080</b>	Yardi Elevate Asset Intelligence for Commercial: Introduction	4 – 4:25 p.m.
<b>RM030</b>	Yardi Elevate for Multifamily: Introduction	4 – 4:25 p.m.
<b>EU045</b>	Yardi Pulse for Commercial: Introduction	4:30 – 4:55 p.m.
<b>RM020</b>	RENTmaximizer Overview	4:30 – 4:55 p.m.

**Thursday, May 23: Morning****8:30 – 9:30 a.m. Session 13**

<b>AC131</b>	Voyager Bank Reconciliation
<b>AC210</b>	Account Trees: Introduction
<b>AC320</b>	GL Allocations
<b>RE580</b>	SSRS Basics for Developers
<b>RE170</b>	Custom Financial Analytics: Introduction
<b>TE215</b>	System Administration Toolbox
<b>TE360</b>	Voyager Standard Interfaces Overview
<b>eL340</b>	Advanced Authoring Tools & Techniques in Yardi eLearning
<b>RT110</b>	New York Roundtable Q
<b>IM200</b>	Investment Management: Introduction
<b>MM330</b>	Maintenance: Work Order Advanced Features
<b>CM180</b>	Tax & Insurance
<b>EU150</b>	Energy Management for Multifamily
<b>RM210</b>	Getting the Most out of RENTmaximizer
<b>RM160</b>	ResidentShield Renters Insurance
<b>KT140</b>	RENTCafé for Residents
<b>AF231</b>	Converting to TRACS 203A
<b>AF201</b>	Affordable Housing Best Practices
<b>AF060</b>	RENTCafé Affordable Housing Roundtable
<b>PH161</b>	Basic MTW Configuration

154. It is likely that personnel from named Landlord Defendants and/or their co-conspirators have attended certain of these conferences. Indeed, a November 2017 post on co-conspirator ALCO Management's website recounts a panel at the 2017 YASC during which

1 Dana Patterson, Senior Vice President of Operations at ALCO, recounted that ALCO uses  
2 RENTmaximizer:

3 On the panel were Dana Patterson, director of asset management at  
4 ALCO Management, Maria Braun, ERP business analyst at Bigos  
5 Management and Lisa Friedman, database coordinator at HCA  
6 Management Services. Aaron Wells, the Yardi client services team  
7 leader for BI, moderated.

8 ...

9 Patterson explained that ALCO also uses Yardi RENTmaximizer  
10 for revenue management, Yardi Payment Processing for electronic  
11 transactions and RENTCafé for marketing, leasing and online  
12 resident services. The addition of Orion to its Voyager platform  
13 combines all of that operational and ancillary services data to  
14 deliver powerful analytics across its portfolio.<sup>154</sup>

15 155. Senior Yardi employees have also specifically advertised RENTmaximizer at  
16 industry conferences and touted, among other things, its ability to de-prioritize landlords'  
17 traditional focus on maximizing occupancy. As noted above, a now-deleted 2014 post on  
18 Yardi's corporate blog recounts that Dharmendra Sawh, then Yardi's "principal for revenue  
19 management," had addressed the Canadian Federation of Apartment Associations' Rental  
20 Housing Conference and was scheduled to speak on a panel at the Canadian Apartment  
21 Investment Conference not long afterwards as part of RENTmaximizer's then-recent entry into  
22 the Canadian market:

23 RENTmaximizer is also entering new global markets, and is now  
24 available for apartment owners and managers in Canada. Though  
25 regulations applied to Canadian rental real estate have often  
26 stymied use of revenue management products there in the past,  
27 things are beginning to change.

28 In July, Sawh addressed the Canadian Federation of Apartment  
Associations' Rental Housing Conference 2014 in Vancouver,  
British Columbia with an introduction to revenue management and  
opportunities for its use in Canadian markets. In September 10,  
he'll speak on a panel at the Canadian Apartment Investment  
Conference in Toronto, Ontario.

<sup>154</sup> *The Benefits of BI*, Alco Management (November 8, 2017),  
<https://www.alcomgt.com/blog/2017/11/08/the-benefits-of-bi/>.

“In addition to government regulation, Canadian apartments are typically run with very high occupancy rates. It may require a change in mentality, but there are some real opportunities to realize rent gains with the use of a revenue management solution,” Sawh said.<sup>155</sup>

156. Further, relevant Yardi personnel serve in industry trade associations and appear at trade association events. For example, Vice President of Yardi Matrix Jeffrey Adler is a Board Member of the National Multifamily Housing Council (NHMC).<sup>156</sup> Yardi promotes its products at NHMC events; for example, a 2021 press release notes that Yardi “is a top-tier Chairs Circle Sponsor” of the NHMC’s “OPTECH” conference and maintains a booth at the event with demos of its products. The same press release quotes Terri Downen, Yardi’s senior vice president of sales, as stating: “It will be great to interact face-to-face again with industry peers at NMHC OPTECH. The Yardi team looks forward to demonstrating how we incorporate user input and trends into technology solutions that set the standard for innovation, connection and operational improvement.”<sup>157</sup>

157. Finally, Yardi revenue managers have regular contact with RENTmaximizer clients to directly help property managers with pricing and keep up to date on their competitors. Further, property managers also call competitor properties to directly obtain pricing information from them on a regular basis.

## 7. Related government investigation.

158. Federal antitrust regulators are reportedly investigating virtually identical conduct by Yardi competitor RealPage, which is facing a related lawsuit in the Middle District of Tennessee based on allegations that RealPage’s YieldStar pricing algorithm “works by

<sup>155</sup> Leah Etling, *Revolutionary Revenue: Market Data Insight* (Aug. 27, 2014), The Balance Sheet: Yardi Corporate Blog, available at <https://web.archive.org/web/20140908043659/https://www.yardi.com/blog/news/revolutionary-revenue/11339.html> (emphasis added).

<sup>156</sup> <https://www.yardimatrix.com/About-Us/Key-Management/Jeff-Adler>.

<sup>157</sup> Yardi, *Yardi Spotlighting Multifamily Solutions at NHMC OPTECH*, <https://www.yardi.com/news/press-releases/yardi-spotlighting-multifamily-solutions-at-nmhc-optech/> (last visited Nov. 3, 2023).



collecting information from property managers who are the company's clients, including what rents they are able to charge tenants," information "fed into an algorithm that then recommends prices daily for each available apartment."<sup>158</sup> This is almost precisely the same as the conduct alleged here.

159. Specifically, according to the November 23, 2022 article,

The Department of Justice's Antitrust Division has opened an investigation into whether rent-setting software made by a Texas based real estate tech company is facilitating collusion among landlords, according to a source with knowledge of the matter. The inquiry is being launched as questions have arisen about a 2017 merger between RealPage and its largest pricing competitor.<sup>159</sup>

160. The investigation followed three letters from Congressional leaders to the DOJ and FTC pushing for such an investigation:

The letters raised concerns that RealPage's pricing software could be pushing rents above competitive levels and allowing big landlords to coordinate their pricing in violation of federal antitrust laws.

"We are concerned that the use of this rate setting software essentially amounts to a cartel to artificially inflate rental rates in multifamily residential buildings," three senators said in a letter in early November.<sup>160</sup>

161. The same article also notes that RealPage has defended its conduct by stating, among other things, that "its software helps reduce the risk of collusion that would occur if landlords relied on phone surveys of competitors to manually price their units."<sup>161</sup> Remarkably, this is precisely the collusion that Yardi facilitates by using data collected through extensive phone surveys (as part of which Yardi employees falsely identify themselves as potential renters) as an input to the RENTmaximizer pricing algorithm.

162. Most recently, on October 12, 2023, the Department of Justice filed a notice in the RealPage action stating that the United States "has a particularly substantial interest in addressing the proper application of Section 1 of the Sherman Act, 15 U.S.C. § 1, to the use of

<sup>158</sup> Heather Vogell, *Department of Justice Opens Investigation Into Real Estate Tech Company Accused of Collusion with Landlords*, ProPublica (Nov. 23, 2022), <https://www.propublica.org/article/realpage-rent-doj-investigation-antitrust>.

<sup>159</sup> *Id.*

<sup>160</sup> *Id.*

<sup>161</sup> *Id.*



1 algorithms by competitors to help set pricing. Companies' use of algorithms in price setting,  
 2 often in an effort to increase pricing, has become more prevalent in the modern economy. As a  
 3 result, the issues involved in this case are of increasing significance to the application of  
 4 antitrust law across the economy."<sup>162</sup> The Department of Justice has indicated that may file a  
 5 potential Statement of Interest in that case by November 15, 2023.

## 6 V. RELEVANT MARKET

7 163. Defendants' actions described herein constitute a single unlawful conspiracy to  
 8 fix, raise, stabilize, or maintain the nationwide multifamily rental prices at artificially high  
 9 levels, and is *per se* illegal under the Sherman Act. This agreement was evidenced by Landlord  
 10 Defendants' reciprocal exchange of competitively sensitive information through Yardi and  
 11 outsourced their independent price decisions to a common decision maker.

12 164. Because of the horizontal nature of the alleged conspiracy, and because the  
 13 conduct alleged here increased prices and reduced output, if the Court declines to analyze this  
 14 case under the *per se* rule, the Court could conduct a "quick look" review. Under either mode of  
 15 analysis, Plaintiffs are not required to prove that Defendants had market power in any defined  
 16 antitrust market.

17 165. To the extent the Court decides to engage in the rule of reason analysis, the  
 18 relevant product market is the multifamily housing rental market, and the relevant geographic  
 19 market is the United States.

20 166. Consumers do not consider housing available for purchase as substitutes for  
 21 multifamily rental apartment units because, among other reasons, purchase of real estate  
 22 requires a substantial financial investment for a down payment that often requires financing. In  
 23 addition, the short-term nature of leases is not equivalent to long-term permanent purchasing.  
 24 Nor is single-family real estate considered an economic substitute for multifamily residential  
 25 real estate, because of amenities, security, and availability.

26  
 27  
 28 <sup>162</sup> See United States' Notice of Potential Participation (ECF No. 599), *In re: RealPage Rental Software Antitrust Litigation (No. II)*, Case No. 3:23-MD-3071 (Oct. 12, 2023).

167. The multifamily rental market satisfies the test for market definition used by federal antitrust enforcement agencies, widely known as the “SSNIP test.” The test asks whether a hypothetical monopolist in a proffered market could profitably impose a small but significant (typically 5%), non-transitory increase in price (a “SSNIP”), without causing a sufficient number of customers to switch to other products or services such that the SSNIP would be unprofitable to the monopolist. If the SSNIP is profitable, the market is properly defined. If the SSNIP is not profitable, the market is too narrowly defined, and does not encompass sufficient economic substitutes.

168. Here, the SSNIP test is satisfied, and the market is properly defined. As described above, pursuant to the Landlord Defendants’ agreement not to compete on price, Landlord Defendants are able to gain (according to Yardi) “on average more than 6% net rental income growth,”<sup>163</sup> yet those increases have not driven enough renters out of the market such that the SSNIP has become unprofitable to Landlord Defendants.

## VI. CLASS ACTION ALLEGATIONS

169. Plaintiffs bring this action on behalf of themselves and all others similarly situated pursuant to Federal Rules of Civil Procedure 23(a) and 23(b)(3) as representatives of the Class, which is defined as follows:

All persons and entities in the United States that leased multifamily housing in the United States from a landlord that used Yardi’s RENTmaximizer or Revenue IQ software programs, or from a division, subsidiary, predecessor, agent, or affiliate of such Defendant or Conspirator, at any time during the period of September 8, 2019, until the Defendants and Conspirators’ unlawful conduct and its anticompetitive effects cease to persist.

170. The Class is so numerous that joinder of all members in this action is impracticable. There are thousands of members in the proposed Class.

171. Plaintiff’s claims are typical of those of the Class.

<sup>163</sup> *Yardi Multifamily Suite*, *supra* note 8.

172. Plaintiffs and members of the Class were all injured by the same unlawful conduct, which resulted in all of them paying more for leases than they otherwise would have in a competitive market.

173. Plaintiffs will fairly and adequately protect and represent the interests of the Class. The interests of the Plaintiffs are not antagonistic to the Class.

174. Questions of law and fact common to the members of the Class will predominate over questions, if any, that may be individual to individual class members, since the Defendants have acted and refused to act on grounds generally applicable to the Class.

175. Questions of law and fact common to the Class include:

- a. Whether Defendants have entered into a formal or informal contract, combination, conspiracy, or common understanding to artificially inflate the price and/or artificially suppress the supply of multifamily housing real estate leases;
- b. If Defendants entered into such a formal or informal contract, combination, conspiracy, or common understanding, whether that conduct violates Section 1 of the Sherman Act under the per se, quick look, or rule of reason modes of analysis;
- c. If Defendants entered into such a formal or informal contract, combination, conspiracy, or common understanding, whether that conduct has in fact artificially inflated price and/or artificially suppressed supply of multifamily housing real estate leases from competitive levels;
- d. The proper measure of damages; and
- e. The contours of appropriate injunctive relief to remediate the anticompetitive effects of the challenged conduct in the future.

176. Plaintiffs and members of the Class are represented by counsel who are experienced and competent in the prosecution of complex antitrust and unfair competition class actions.

177. Class action treatment is the superior method for the fair and efficient adjudication of the controversy in that, among other things, such treatment will permit a large number of similarly situated persons or entities to prosecute their common claims in a single forum simultaneously, efficiently, and without the unnecessary duplication of effort and expense that numerous individual actions would engender. The benefits of proceeding through the class mechanism, including providing injured persons or entities with a method of obtaining

redress for claims that might not be practicable for them to pursue individually, substantially outweigh any difficulties that may arise in the management of this class action.

**VII. CAUSES OF ACTION**  
**FIRST CLAIM FOR RELIEF**  
**VIOLATION OF SECTION 1 OF THE SHERMAN ACT**  
**FOR AGREEMENT IN RESTRAINT OF TRADE (HUB AND SPOKE CONSPIRACY)**  
**15 U.S.C. § 1**

**(On Behalf of Nationwide Class for Injunctive and  
Equitable Relief and Compensatory Damages)**

178. Plaintiffs incorporate and reallege, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

179. Beginning in 2011, Defendants engaged in a continuing contract, combination, or conspiracy to unreasonably restrain interstate trade and commerce in violation of Section 1 of the Sherman Act, 15 U.S.C § 1.

180. The contract, combination, or conspiracy alleged herein has consisted of a continuing agreement among Defendants to use Yardi's pricing algorithms to artificially inflate price in the nationwide market for multifamily rental housing. This combination, generally known in antitrust law as a hub and spoke conspiracy, consists of a combination of (1) a set of vertical agreements between Defendants and Yardi that implement Yardi's revenue management program and (2) a horizontal agreement amongst all Defendants to use Yardi's revenue management program.

181. The contract, combination, or conspiracy alleged herein has caused Plaintiffs and Class members to suffer overcharge damages.

182. There are no procompetitive justifications for the Defendants' cartel, and any proffered justifications, to the extent legitimate, could have been achieved through less restrictive means.

183. Defendants' conspiracy is a *per se* violation of Section 1 of the Sherman Act. In the alternative, Defendants' conspiracy violates section 1 of the Sherman Act under either a quick look or rule of reason analysis.

**SECOND CLAIM FOR RELIEF  
VIOLATION OF SECTION 1 OF THE SHERMAN ACT  
FOR AGREEMENT IN RESTRAINT OF TRADE (SET OF VERTICAL  
AGREEMENTS) 15 U.S.C. § 1**

**(On Behalf of Nationwide Class for Injunctive and  
Equitable Relief and Compensatory Damages)**

184. Plaintiffs incorporate and reallege, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

185. Beginning in 2011, Defendants engaged in a continuing contract, combination, or conspiracy to unreasonably restrain interstate trade and commerce in violation of Section 1 of the Sherman Act, 15 U.S.C § 1.

186. The contract, combination, or conspiracy alleged herein has consisted of a set of vertical agreements between Defendants and Yardi for each Defendant to use Yardi's pricing algorithms to set prices for multifamily rental housing. Sets of vertical agreements are actionable as an overall combination under antitrust law, and are analyzed under the rule of reason.

187. Each individual agreement between a Defendant Landlord and Yardi in isolation had the anticompetitive effect of artificially inflating prices for multifamily rental housing for that Defendant Landlord.

188. In the aggregate, the set of vertical agreements between Defendants Landlords and Yardi artificially inflated prices in the relevant market of multifamily rental housing in the United States. In particular, as a result of the vertical agreements, competitor Defendant Landlords each delegated pricing to a centralized third party, Yardi, with the understanding that Yardi revenue management software would inflate the rents that they collectively charged.

189. The contract, combination, or conspiracy alleged herein has caused Plaintiffs and Class members to suffer overcharge damages.

190. There are no procompetitive justifications for the Defendants' cartel, and any proffered justifications, to the extent legitimate, could have been achieved through less restrictive means.

191. Defendants' conspiracy violates section 1 of the Sherman Act under either a quick look or rule of reason analysis.

**THIRD CLAIM FOR RELIEF  
VIOLATION OF SECTION 1 OF THE SHERMAN ACT  
FOR CONSPIRACY TO EXCHANGE COMPETITIVE INFORMATION  
15 U.S.C. § 1**

**(On Behalf of Nationwide Class for Injunctive and  
Equitable Relief and Compensatory Damages)**

192. Plaintiffs incorporate and reallege, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

193. Beginning in 2011, Defendants and their co-conspirators entered into a continuing agreement to regularly exchange detailed, timely, competitively sensitive, and non-public information about their operations. This agreement is an unreasonable restraint of trade in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1.

194. Defendants' acts in furtherance of their combination or conspiracy were authorized, ordered, or done by their officers, agents, employees, or representatives while actively engaged in the management of Defendants' affairs.

195. Defendants' anticompetitive acts involved United States domestic commerce and import commerce, and had a direct, substantial, and foreseeable effect on interstate commerce by raising and fixing prices for multifamily real estate leases.

196. The relevant product market is the market for the lease of multifamily real estate and the relevant geographic market is nationwide.

197. Defendants possess market power in the relevant antitrust market.

198. Defendants could impose an increase in the price of leases collectively without causing many consumers to switch their purchases to another lease. Leases constitute a unique product market.

199. The information regularly exchanged by Defendants pursuant to the agreement has consisted of detailed, competitively sensitive, and non-public information about current supply, production, and pricing plans regarding leasing.



1           200. Landlord Defendants' regular information exchanges through Yardi reflected  
2 concerted action between horizontal competitors in the market for leases. In particular, Landlord  
3 Defendants understood that information they provided would be incorporated into Yardi Matrix  
4 and also used, in aggregated fashion, to provide pricing recommendations through  
5 RENTmaximizer.

6           201. Each Landlord Defendant furnished competitively sensitive information to other  
7 leasing companies with the understanding that it would be reciprocated in the form of pricing  
8 recommendations that utilized that data. These reciprocal exchanges of information between  
9 Landlord Defendants constituted a horizontal exchange of information.

10           202. The collective agreement to regularly exchange detailed and non-public  
11 information about current production, supply, and pricing of leases suppressed competition  
12 between the Defendants.

13           203. When Defendants that are competing for the same consumers exchange  
14 competitive information, it reduces the incentives to compete on price. Accordingly, Defendants  
15 used the data obtained through Yardi RENTmaximizer to reduce the uncertainty that they each  
16 should have faced from not knowing what their competitors were offering and providing in the  
17 leasing market. This strategic information was a material factor in Defendants' decisions to  
18 inflate the prices that Plaintiffs and Class members paid for leases during the Class Period.

19           204. Defendants' unlawful agreements to exchange, and the actual exchanges of non-  
20 public, timely, and detailed data were not reasonably necessary to further any procompetitive  
21 purpose. The information exchanged between Defendants was current, easily traceable to its  
22 source, confidential, and related to a core characteristic of competition between them.

23           205. The information-exchange agreement has had the effect of (1) reducing and  
24 suppressing competition among Defendants in the nationwide multifamily market, and (2)  
25 inflating the prices of leases during the Class Period.

26           206. As a result of Defendants' unlawful conduct, Plaintiffs and the members of the  
27 Class have been harmed by being forced to pay inflated prices for leases.  
28

207. As a direct and proximate result of Defendants' anticompetitive conduct, Plaintiffs and members of the Class have been injured in their business or property and will continue to be injured in their business and property by paying more for leases than they would have paid and will pay in the absence of the conspiracy.

208. This horizontal agreement to exchange information constitutes a violation of Section 1 of the Sherman Act under a rule of reason analysis.

### **REQUEST FOR RELIEF**

WHEREFORE, Plaintiffs, on behalf of themselves and the Class of all others so similarly situated, respectfully request judgment against Defendants as follows:

A. The Court determine that this action may be maintained as a class action under Rule 23(a), (b)(2), and (b)(3) of the Federal Rules of Civil Procedure, appoint Plaintiffs as Class Representatives and their counsel of record as Class Counsel, and direct that notice of this action, as provided by Rule 23(c)(2) of the Federal Rules of Civil Procedure, be given to the Class, once certified;

B. The unlawful conduct, conspiracy, or combination alleged herein be adjudged and decreed in violation of Section 1 of the Sherman Act;

C. Plaintiffs and the Class recover damages, to the maximum extent allowed under the applicable laws, and that joint and several judgments in favor of Plaintiffs and the members of the Class be entered against Defendants in an amount to be trebled to the extent such laws permit;

D. Defendants, their affiliates, successors, transferees, assignees and other officers, directors, partners, agents, and employees thereof, and all other persons acting or claiming to act on their behalf or in concert with them, be permanently enjoined and restrained from in any manner continuing, maintaining, or renewing the conduct, conspiracy, or combination alleged herein, or from entering into any other conspiracy or combination having a similar purpose or effect, and from adopting or following any practice, plan, program, or device having a similar purpose or effect;

1 E. Plaintiffs and the members of the Class be awarded pre- and post- judgment  
 2 interest as provided by law, and that such interest be awarded at the highest legal rate from and  
 3 after the date of service of this Complaint;

4 F. Plaintiffs and the members of the Class recover their costs of suit, including  
 5 reasonable attorneys' fees, as provided by law; and

6 G. Plaintiffs and the members of the Class have such other and further relief as the  
 7 case may require and the Court may deem just and proper.

8 **JURY TRIAL DEMANDED**

9 Plaintiffs demands a trial by jury, pursuant to Rule 38(b) of the Federal Rules of Civil  
 10 Procedure, of all issues so triable.

11 DATED: November 3, 2023

HAGENS BERMAN SOBOL SHAPIRO LLP

12 /s/ Steve W. Berman

13 Steve W. Berman (WSBA No. 12536)

14 /s/ Theodore Wojcik

15 Theodore Wojcik (WSBA No. 55553)

16 /s/ Stephanie A. Verdoia

17 Stephanie A. Verdoia (WSBA No. 58636)

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